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# Chapter 4: Environmental Assessment

## 1 Introduction/Purpose and 2 Need

3 Perry's Victory and International Peace Memorial  
4 is a fitting tribute to both a pivotal U.S. naval  
5 victory in the War of 1812 and a lasting peace  
6 between former enemies. The Memorial consists  
7 of a 352-foot high column on South Bass Island in  
8 Lake Erie, surrounded by 25 acres of landscape  
9 grounds. Visible for miles, it stands as a reminder  
10 not only of the events of the War of 1812, but also  
11 as a symbol of international peace between Great  
12 Britain, Canada, and the United States.

13 The National Park Service (NPS) is considering a  
14 series of actions in association with the treatment  
15 recommendations developed in the Cultural  
16 Landscape Treatment Plan (CLTP) for Perry's  
17 Victory and International Peace Memorial. The  
18 Cultural Landscape Treatment Plan was prepared  
19 to provide park staff with a long-term vision for  
20 protecting, managing, sustaining, and interpreting  
21 the designed historic landscape and guidance on  
22 integrating the cultural landscape with the visitor  
23 experience.

24 The Environmental Assessment (EA) analyzes the  
25 potential impacts and effects resulting from the  
26 implementation of the No Action Alternative and  
27 three action alternatives for expanding the  
28 facilities at Perry's Victory and International Peace  
29 Memorial. The NPS has prepared the EA in  
30 compliance with: National Environmental Policy  
31 Act of 1969, as amended (NEPA); the Council on  
32 Environmental Quality (CEQ) regulations  
33 implementing NEPA [40 Code of Federal  
34 Regulations (CFR) 1500-1508]; the National  
35 Historic Preservation Act of 1966, as amended  
36 (NHPA); NPS Director's Order-12 (as reflected in

37 the DO-12 Handbook); and Section 106 of the  
38 National Historic Preservation Act of 1966 as  
39 amended. The NEPA process is being used to  
40 comply with Section 106 of the NHPA and the  
41 Advisory Council on Historic Preservation's  
42 implementing regulations at 36 CFR 800.8 (c).

43 Perry's Victory and International Peace Memorial  
44 is a unit of the NPS and therefore, in accordance  
45 with the (NEPA) of 1969, the NPS acting as lead  
46 federal agency has prepared this EA to identify  
47 alternatives and assess the potential impacts of the  
48 proposed action. Concurrently, the NPS has been  
49 conducting consultation in accordance with  
50 Section 106 of the National Historic Preservation  
51 Act (NHPA) and Section 7 of the Endangered  
52 Species Act of 1973.

## 53 Purpose and Need

54 The purpose of the proposed project is to:  
55 preserve the Memorial and its designed cultural  
56 landscape while guiding rehabilitation for  
57 enhancing the visitor experience and enjoyment of  
58 the landscape through integration of  
59 interpretation with the cultural landscape; provide  
60 ABAAS accessibility to indoor/outdoor  
61 experiences that coincide with the enhanced  
62 stewardship of the park's significant cultural and  
63 natural resources; and provide a backdrop within a  
64 peaceful setting to promote a stronger  
65 understanding of and meaningful relationship to  
66 the Battle of Lake Erie in 1813 and resultant  
67 lessons of international peace.

68 The project is needed to provide a richer and more  
69 complete visitor experience of the park through  
70 access to the cultural landscape and associated  
71 interpretation and to provide additional  
72 opportunities for expanded programming

integrated within the landscape. Also, the park has accrued features from both planned and extemporaneous decisions in recent years and guidance on intentional preservation, removal or rehabilitation of the designed landscape as a whole is needed.

## Objectives

All alternatives identified for detailed analysis must meet objectives to a large degree and resolve the purpose of and need for the action. The following objectives were identified by the planning team:

- Preserve the monument and its designed landscape as fundamental resources and values of the park.
- Preserve the horizontality of the landscape setting, supported by open lawn, upper and lower plazas, and expanses of water surrounding the park - all working together to accentuate the vertical column;
- Integrate architecture and the landscape with plazas; seawalls, sidewalks, and circulation reflecting traditional Beaux Arts style.
- Preserve viewsheds to and from the Memorial; views from a distance while approaching South Bass Island by boat; view of the grounds and Memorial from the eastern end of Gibraltar Island; views of the column from historic grounds; and views from the column to the site of the 1813 Battle of Lake Erie.
- Design specific opportunities for engagement through interaction with—and interpretation—of both cultural and natural landscape features. Implementation of visitor ABAAS standards at the Memorial plazas, the visitor center, and the pedestrian circulation system would be paramount for expanded visitor opportunities.
- Establish compatible spatial transitions between the surrounding community and the Memorial. Provide for guidance in managing viewsheds and spatial definitions, and the

character of gradual or defined perimeters between the park and adjacent neighborhoods;

- Provide better integration of sidewalks connecting the designed landscape to the surrounding community;
- Examine methods to achieve sustainability goals for lighting and landscape maintenance.
- Coordinate the plaza and column rehabilitation projects with vegetation replacement in the vicinity of the existing Austrian Pines. These trees will be lost during the rehabilitation project.
- Apply a consistent and intentional approach to design and maintenance, given that the site presents inconsistent application of materials such as concrete, brass and vegetation.

## Relationship to Park Planning Efforts

This plan fulfills a park priority for resource management and visitor experience at Perry's Victory and International Peace Memorial and serves as a component of the park's planning portfolio. This follows the NPS's "Planning Portfolio" construct, consisting of a compilation of individual plans, studies, and inventories, which together guide park decision making. The planning portfolio enables the use of targeted planning products (such as this one) to meet a broad range of park planning needs, a change from the previous NPS focus on stand-alone general management plans. The planning team relied on the park's previous planning and masterplan concept designs for guidance in developing the alternatives. Documents include: *Cultural Landscape Report for Perry's Victory and International Peace Memorial* (1994); *Cultural Landscape Inventory* (2011); *Long Range Interpretive Plan* (2012); *Foundation Document* (2012); *National Register of Historic Places Nomination (Updated)* (2014); *Development Concept Revision* (1992); *Design Development – Approach Mall* (1994); and *Visitor Center Construction Drawings* (2000). Combined, these

documents provide Perry's Victory and International Peace Memorial with a vision and clear direction for sustained long-term management and interpretation, and preservation of the overall character and historic features of the designed landscape with priorities on natural and cultural resource conditions and visitor use and experience. Recommendations in the Cultural Landscape Treatment Plan were developed in conjunction with the development of the alternatives to be evaluated in the EA. The treatment recommendations informed the development of the alternatives and aided in decisions on actions that were common to the alternatives.

## Park Background

Perry's Victory and International Peace Memorial consists of a 352-foot high column on South Bass Island in Lake Erie surrounded by 25 acres of landscaped grounds. It is approximately eight miles northeast of Port Clinton, Ohio (Figure 4-1). Visible for miles, it stands as a reminder not only of the events of the War of 1812, but also as a symbol of international peace between Great Britain, Canada, and the United States. The Memorial was built by a nine-state commission with matching federal funds between 1912 and 1915. Twenty-one years after it was built, Congress charged the NPS to preserve and manage the Memorial.

The Memorial site straddles a narrow isthmus about 250 yards wide between the village of Put-in-Bay to the west and the former agricultural area to the east. Although devoted to farming and viticulture in the past, much of the island has been converted to summer housing and resorts. The Memorial grounds divide the residential and commercial areas of the village from the less populated and largely residential east end of South Bass Island.

When assembled from the various properties of individual landholders in 1911–1912, the Perry's Victory and International Peace Memorial site encompassed 14.25 acres. After the NPS acquired the property and designated it a National Monument, the boundaries of the site changed.

The National Park Service added acreage to the east and west of the Memorial beginning in 1959. They also moved the location of part of the south seawall farther south in 1977–1978 and removed most of the road that formed the original western boundary in 2001–2002. Historically, the boundaries included: Chapman Avenue on the west side (no longer existing); seawalls to the north and south, and a slight ridge to the east, formed by the topography and defined by large tree plantings. Most development of the island in recent years consists of summer homes west of the village, and minimal construction east of the park. NPS erected a maintenance building and summer residences for staff along the eastern edge of the park and beyond the original site boundaries. These buildings are slightly screened from the Memorial by tree plantings that mark the original property line.

## Park Significance

Park significance statements express why park resources and values are important enough to warrant national park designation. Statements of the park's significance describe why an area is important within a global, national, regional, and systemwide context. These statements are directly linked to the purpose of the park and are substantiated by data or consensus. They reflect the most current scientific or scholarly inquiry and cultural perceptions which may have changed since the park's establishment.

Perry's Victory and International Peace Memorial is significant because:

- The battle, fought between American and British naval forces, was a decisive American victory in the War of 1812 for forces under the command of Oliver Hazard Perry, who launched the battle from the strategic safe harbor at South Bass Island.
- The victory precipitated events with both personal consequences for individuals involved in the battle and far-reaching results for nations involved in the War of 1812-settlement patterns. American Indian tribes including the Wyandots, Delaware, Ottawa



and Miami were forced westward across the Mississippi River making way for territorial expansion. Tecumseh, the Native American Shawnee warrior and his confederacy of tribes sided with the British in the War of 1812. After

the United States took control, as peace was achieved through the Treaty of Ghent, the British and their Indian allies retreated to upper Canada.



**Figure 4-1:** Project Boundary for Perry's Victory and International Peace Memorial within the context of Lake Erie and northern Ohio.



1    ■ The Memorial serves as a symbol of  
 2    international peace and a constant reminder of  
 3    the ongoing cooperation between former  
 4    enemies. It was an engineering marvel of its  
 5    time and an architectural statement to  
 6    memorialize the battle as well as the centennial  
 7    of lasting peace between Great Britain,  
 8    Canada, and the United States of America.  
 9    Commissioned by nine states including Ohio,  
 10   Michigan, Pennsylvania, Illinois, Wisconsin,  
 11   New York, Kentucky, Massachusetts, and  
 12   Rhode Island, and located on South Bass  
 13   Island, the location is symbolic for being  
 14   within sight of the undefended border  
 15   (Figures 4-2 and 4-3).

16   ■ The Memorial is also significant because it  
 17   serves as a tomb for 3 American officers and 3  
 18   British officers killed in the Battle of Lake Erie  
 19   on September 10, 1813. Their remains lie in  
 20   the domed room at the center of the base of  
 21   the column. They were originally located  
 22   where the Village of Put-In-Bay is now located  
 23   but were removed and interred in the crypt at  
 24   the Memorial on September 11, 1913.

25   ■ The lasting results of peace symbolized by  
 26   disarmament and arbitration.

27   ■ The memorial offers the ability to interpret  
 28   war from multiple perspectives <sup>1</sup>

29   The park's significance, and management  
 30   objectives are not linked to the impairment  
 31   findings. Management actions and projects are  
 32   subject to review through the NEPA process to  
 33   assess potential impacts to natural and cultural  
 34   resources.

## 35   **Public Process**

36   An internal scoping meeting was held at Perry's  
 37   Victory and International Peace Memorial on  
 38   October 5-6, 2016, and included NPS Midwest  
 39   Region staff, park staff, and the project team



**Figure 4-2:** Panoramic views are available from the observation deck of the Memorial column. This viewshed is critical to understanding the Battle of Lake Erie in 1813.



**Figure 4-3:** Orientation maps are provided on the observation deck of the column to help interpret the views and the significance of the battle.

40   members from Commonwealth Heritage Group,  
 41   Inc. (CHG) and Wiss, Janney, Elstner, Inc. (WJE).  
 42   The meeting focused on development of the  
 43   *Comparative Analysis (CA)* and the *Cultural*  
 44   *Landscape Treatment Plan (CLTP)* and associated  
 45   *Environmental Assessment (EA)*. Stakeholder  
 46   groups were identified in the meeting and all  
 47   identified received invitations to scheduled open  
 48   house meetings and the formal public meeting for  
 49   review of the design concept alternatives and the  
 50   draft CLTP/EA.

51   A public open house was held on October 6, 2016  
 52   to introduce the CLTP/EA project to residents of  
 53   South Bass Island, park staff, and interested

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1    *Perry's Victory and International Peace Memorial Foundation Document*, National Park Service, Department of the Interior, October 2012, 3-5.

stakeholders. The project was presented by the Superintendent and the planning team was introduced. Goals and objectives of the project were presented and participants expressed various concerns about effects of the project on natural resources and on the condition of the village beach, located south of the park and adjacent to the south seawall.

An internal planning workshop with park staff and the planning team was held on May 16, 2017. Goals were to review progress on the CLTP/EA, develop alternative design concept plans, and formulate further specific goals and objectives for the project. A second public open house was held the day after the workshop to present conceptual alternatives and gain feedback for use in subsequent planning and design. The public had an additional avenue of participation through a public open house on October 25, 2017. This meeting gave stakeholders and staff an opportunity to see developed concept design alternatives. Comments and suggestions were incorporated into the draft CLTP/EA based on public input. The next submission of the document will be for public review on the NPS Planning, Environment, and Public Comment (PECP) system website. After a 30-day review, all comments will be analyzed, and any revisions deemed necessary will be made and incorporated into the final document.

Informal consultation with U.S. Fish and Wildlife Service, Ohio Field Office and the State Historic Preservation Officer was initiated on January 13, 2017. Letters were sent from the park to both agencies, serving as notification that the park had begun the NEPA process and was proposing to have an EA available for public and regulatory review in the fall of 2017.

## Impact Topics

### Impact Topics Retained for Analysis

Impact topics are the resources of concern that may be affected by the range of alternatives reviewed in the EA. Impact topics were identified to ensure alternative comparisons were based on the most relevant issues. Impact topics are derived from issues raised during scoping and from NPS

guidelines concerning topics that should be taken under consideration when conducting NEPA and Section 106 analysis.

The following impact topics were retained for further analysis: soils and geology; water resources/floodplains; vegetation; wildlife; threatened and endangered species; historic buildings and structures; cultural landscapes; historic viewsheds; visitor use and experience; and human health and safety. A brief rationale for the selection of each impact topic is provided and each impact topic is discussed in detail in the Affected Environment section.

**Soils and Geology.** The NPS actively seeks to understand and preserve the soil resources of parks, and to prevent to the extent possible, the erosion, physical removal or contamination of the soil or its contamination of other resources. There is potential for soils disturbances from the implementation of the alternatives. Therefore, this topic was retained for further analysis.

**Water Resources and Floodplains.** Due to the location of the park on South Bass Island, storms and subsequent flooding have periodic effects on the landscape and historic features. The watershed hydrology can be further affected by implementation of the alternatives. Therefore, this topic was retained for further analysis.

**Vegetation.** Vegetation disturbance would occur and the introduction of more invasive non-native species is possible from activities implemented in the alternatives. Therefore, this topic was retained for further analysis.

**Wildlife.** The landscape and vegetation of the park supports a variety of birds, small mammals, and reptiles. Disturbances from the implementation of the preferred alternative would impact some species and their potential habitats. Therefore, this topic was retained for further analysis.

**Threatened and Endangered Species.** Species of concern (flora and fauna) are present at the park. Disturbances due to the implementation of the alternatives would impact critical species on

the site and within the site's regional context. Therefore, this topic was retained for further analysis.

**Historic Buildings and Structures.** The future of historic structures within the landscape of the park is a key issue in the CLTP. The plan includes a variety of treatment recommendations and actions within the alternatives. Therefore, historic buildings and structures are retained as "cultural resources for analysis" in the EA.

**Cultural Landscapes.** The preservation and integration of the cultural landscape into the visitor use and experience of the park and the interpretation of the landscape are key concerns in the CLTP, which contains several treatments and actions. Some actions may require ground disturbances or removal of vegetation with potential impacts to the cultural landscape of the park. Therefore, this topic was retained as "cultural resources for analysis" in the EA.

**Historic Viewsheds.** Management of established historic viewsheds, critical to the interpretation of the Battle of 1813 and critical to the visitor experience of the park, has potential impact on the site. Therefore, this topic was retained for further analysis.

**Visitor Use and Experience.** The alternatives would impact overall visitor understanding of the designed landscape and the stories and themes essential to understanding the significance of the park. Therefore, this topic was retained for further analysis.

**Human Health and Safety.** Due to recommended actions within the alternatives, visitor use would increase and with it, continual maintenance and management of facilities to ensure the safety and welfare of the public. Therefore, this topic was retained for further analysis.

## **Impact Topics Considered and Not Retained for Analysis**

**Environmental Justice.** Presidential Executive Order 12898, General Actions to Address

Environmental Justice in Minority Populations and Low-Income Populations, requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing the disproportionately high and/or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. According to the Environmental Protection Agency, environmental justice is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. The goal of fair treatment is not to shift risks among populations, but to identify potentially disproportionately high and adverse effects and identify alternatives that may mitigate these impacts.

The Village of Put-in-Bay contains both minority and low-income populations; however, environmental justice is dismissed as an impact topic for the following reasons:

- Implementation of all alternatives would not result in any identifiable adverse human health effects. Therefore, there would be no direct or indirect adverse effects on any minority or low-income populations.
- The impacts associated with implementation of all alternatives would not disproportionately affect any minority or low-income population or community.
- Implementation of all alternatives would not result in any identified effects that would be specific to any minority or low-income community.
- The impacts to the socioeconomic environment resulting from implementation of any of the action alternatives would be beneficial. In addition, NPS and the planning team do not anticipate the impacts on the socioeconomic environment to alter the physical and social structure of the nearby communities.

**Ethnographic Resources.** Because no ethnographic resources or traditional cultural properties exist in the areas under consideration in this document, this topic has been dismissed from further analysis.

**Indian Trust Resources.** Indian trust resources include tribal lands, assets, resources, and treaty rights. Any anticipated impacts to Indian trust resources that would result from a federal action must be explicitly addressed in environmental documents. There are no Indian trust resources within the boundaries of Perry's Victory and International Peace Memorial. Therefore, this topic has been dismissed from further consideration.

**Archeological Resources.** According to the National Register Nomination update (2014) for Perry's Victory and International Peace Memorial, there are no significant archeological sites associated with the historic grounds or within areas outside the historic grounds that may be disturbed by actions proposed within the project.

**Museum Collections.** The actions described in the alternative would have no impact on museum collections. Therefore, this topic has been dismissed from further analysis.

**Air Quality.** The actions described in the alternative would have no impact on air quality. Therefore, this topic has been dismissed from further analysis.

**Water Quality.** The actions described in the alternative would have no impact on water quality. Therefore, this topic has been dismissed from further analysis.

**Carbon Footprint.** For the purposes of this planning effort, "carbon footprint" is defined as the sum of all emissions of carbon dioxide and other greenhouse gases, including methane and ozone, that would result from implementation of the action alternative. Understanding the carbon footprint of the alternatives is important for determining contribution to climate change. This impact topic was dismissed from further analysis

for several reasons: 1) no changes would occur in the way visitors reach the project area by boat or airplane as a result of the alternatives; 2) the minimal new development proposed in the project area would not noticeably increase greenhouse gas emissions; and 3) newer sustainable building practices should help limit additional greenhouse gas emissions.

**Natural Soundscape.** An important part of the NPS mission is preservation of natural soundscapes associated with national park units as indicated in NPS Management Policies, 2006, and Director's Order 47: Sound Preservation and Noise Management. The action alternatives do not introduce additional noise and traffic from visitors and park staff. Because the alternative would not increase noise levels, natural soundscapes was dismissed as an impact topic.

**Lightscape.** In accordance with NPS Management Policies, 2006, the NPS strives to preserve natural ambient lightscapes, which are natural resources and values that exist in the absence of human-caused light. Lighting of the Memorial column has been part of its history. The action alternative would not increase any use of night lighting, specifically at the visitor center and entrances to the park. Therefore, lightscape was dismissed as an impact topic.

**Natural or Depletable Energy Resource Requirements and Conservation Potential.** In accordance with NPS Management policies, 2006, and Executive Orders 12873 and 12902, there are requirements in everything the NPS does that will have some small affect in improving our environmental footprint (green buying and sustainable building materials, etc.). However, individual changes at Perry's Victory and International Peace Memorial are unlikely to have adverse impacts to the wider universe of energy use and depletable resources. Therefore, this impact topic was dismissed from further analysis.

## Development of Alternatives

The NEPA process consists of evaluating the environmental effects of a federal undertaking,



which is presented as a series of at least two alternative actions. This section describes proposed alternatives that respond to the purpose and need of the project. Three alternatives were evaluated: Alternative 1: No Action; Alternative 2: Curvilinear Pedestrian Circulation and Integration of the Historic Designed Landscape; and Alternative 3: Rectilinear Pedestrian Circulation Maintained with Existing and Proposed Connecting Walkways and Visitor Nodes.

**Alternative 1 (No Action):** Alternative 1 preserves and maintains existing conditions at the park. Within this alternative current management strategies would remain the same and there would be no addition of facilities or expanded interpretation in association with the cultural landscape.

**Alternatives 2 and 3 (Action Alternatives):** The proposed design concept alternatives are intended to address issues, challenges/opportunities, goals and objectives outlined in previous park planning documents and identified by park staff through workshops and discussions, NPS communications, and from the project scope. Meetings and workshops with park staff were instrumental in the decision-making process and included specific goals and objectives for a comprehensive vision for the design and management of the park for the next 20 years. The action alternatives have common goals and objectives but contrasting implementation strategies. Public input received during scoping was important in the development of the alternatives. This process helped the planning team understand the public's values and preferences regarding visitor experiences in the park and their concerns, issues, and suggestions related to accessibility, quality of the visitor experience, vegetation management, protection of cultural and natural resources, and the condition of the adjacent village beach.

## The No Action Alternative

### Preserve Existing Conditions and Continue Current Management Strategies

*Refer to Figure 4-4: Alternative 1*

Alternative 1 would reflect continuation of current practices with no improvements for visitor accommodation and accessibility. The following are challenges related to existing conditions in the park based on discussions and comments from park staff.

- There is no clear sense of entry and orientation as visitors arrive at the park.
- Visitor center precinct and the pedestrian circulation system has limited compliance with Architectural Barriers Act Accessibility Standards (ABAAS).
- Restrooms are partially accessible and the pedestrian route that leads to the restrooms from parking north of the Memorial is not in compliance with ABAAS standards. Compliant accessibility does not include using parking areas or roads to substitute for accessible circulation.
- The Memorial plazas and column are not compliant with ABAAS standards. Programmatic accessibility is not provided near the Memorial and is limited at the visitor center (Figures 4-5 and 4-6).



**Figure 4-5:** Small staircases are the only pedestrian access to the lower plaza. The grand ceremonial steps are the only access to the upper plaza. There is no ABAAS accessibility for the plazas.



**Figure 4-6:** View from the north seawall clearly shows the barriers to ABAAS accessibility to the Memorial and plazas.



**Figure 4-7:** Definition of enclosed space is diminished east of the Memorial at the edge of the historic core and the park housing/administration management zone.



**Figure 4-8:** Definition of enclosed space is diminished west of the Memorial at the edge of the historic core and the visitor access management zone.

- 1    ■ A Black powder magazine is located in close
- 2    proximity to occupied buildings and a
- 3    propane tank. This location is not compliant
- 4    with regulations governing the storage of black
- 5    powder.
- 6    ■ The park's landscape maintenance program is
- 7    limited to a seasonal gardener position.
- 8    ■ Spatial patterns defining the historic landscape
- 9    are diminished. Openness in the center of the
- 10   grounds was historically framed by vegetative
- 11   masses east and west of the historic core
- 12   (Figures 4-7 and 4-8).
- 13   ■ There is no clarification of goals for the visitor
- 14   experience including recreational use of the
- 15   formal expanse of lawn in the historic core.
- 16   ■ Replacement paving for the gravel surfacing of
- 17   the upper plaza remains an issue. Color,
- 18   textures, patterns, life-cycle costs and material
- 19   sustainability should be the basis for decision-
- 20   making as well as original design intent and
- 21   historic precedent.
- 22   ■ Above ground utilities and powerlines remain
- 23   on the site within historic viewsheds.
- 24   ■ There is no connection to East Point from the
- 25   park. The current sidewalk north of the
- 26   Memorial ends at the transition from the
- 27   historic core management zone to the park
- 28   housing/maintenance management zone.

- 29   ■ There is no clear direction or access from the
- 30   park to the village beach access across
- 31   Delaware Avenue (Figures 4-9 and 4-10).



**Figure 4-9:** The village beach provides the only picnic table amenities around the park.



## Perry's Victory and International Peace Memorial

- Black powder magazine
- Dumpster
- Camper pad

[illegible]

This drawing was prepared to illustrate the Environmental Assessment for Perry's Victory and International Peace Memorial in 2018. This drawing is provided to illustrate potential treatment alternatives, and is not intended to serve as a design or construction document.

**DRAFT**







**Figure 4-10:** From within the park there is no clear direction or node along the pedestrian circulation system to define clear access from the park to the beach boardwalk.

## Actions Common to Alternatives 2 and 3 (Action Alternatives)

Within a framework of rehabilitation, the actions within the design concept alternatives possess several commonalities in approach. Significant characteristics of the historic landscape would be preserved while adapting the site to meet contemporary needs and park management objectives. Significant characteristics include:

- **Horizontality of the landscape setting which accentuates the vertical column:** The integration of architecture and the formal landscape is characteristic of the Beaux Arts style.
- **Definition of the boundary edges of the historic core with tree massings:** Historic core boundary edges (refer to Figure 4-4). The historic core is defined by horizontal expanses of grass lawn, two horizontal plazas, and horizontal expanses of water surfaces north and south of the Memorial. Current tree massings provide a vertical contrast to the topography and a sense of spatial enclosure at the edges of the historic core. The number of trees providing spatial definition have diminished over time.
- **Integration of architecture and landscape typical of Beaux Arts style plazas, sidewalks, and circulation.**

- **Preservation of viewsheds to and from the Memorial:** These include: views from the distance when approaching South Bass Island by boat; views of the grounds and Memorial from the eastern end of Gibraltar Island; views of the column from within the park; and views from the column to the site of the 1813 Battle of Lake Erie.

Goals and objectives established in the Cultural Landscape Treatment Plan common to each action alternative include:

- Integration of expanded interpretation with an approach to managing the cultural landscape;
- Utilization of the *Long Range Interpretive Plan* (2012) visitor experience objectives to form a justification for the proposed introduction of elements into the historic landscape;
- Preservation of the designed landscape as the principal asset of the Memorial, including the individual features and the overall historic character;
- Enhancement of the visitor experience by creating a sense of entrance and welcome to the park and opportunities for engagement with the park through interaction with and interpretation of both cultural and natural resources;
- Provision of full ABAAS access to the Memorial plazas, the visitor center, the parkwide pedestrian circulation system, and other park administration buildings and housing;
- Facilitation of enhanced visitor experience of the park through additional circulation options, pavilions for expanded programming and events, visitor nodes for seating and enjoyment of viewsheds, and expanded interpretation of visitor center exhibits and strategically located wayside exhibits;
- Installation of new tree plantings along the north/south perimeter edge of the historic core boundary to augment existing tree

plantings, creating a more defined enclosure of the horizontal landscape of the historic core;

- Installation of a pedestrian sidewalk adjacent to the north seawall;

- Design of transitions from the village to the park from both Hartford Avenue and Toledo Avenue. Transition areas would be designed to create a sense of entrance and welcome to the park and provide orientation, information, and choices for the visitor experience;

- Integration and connection of the park to the village beach boardwalk access and visitor amenities;

- Provision of additional park staff housing and park administration facility; and

- Provision of a black powder magazine and buffer zone that meets compliance standards.

## Alternative 2 Action Alternative

### Curvilinear Pedestrian Circulation; Integration of Landscape Focus

*Refer to Figure 4-11: Alternative 2*

Alternative 2 would preserve the designed historic landscape indicative of the Beaux Arts tradition of formal integration of architecture and landscape through design of a curvilinear pedestrian circulation system. The curvilinear framework would retain the contrast of the horizontal landscape with the vertical column of the Memorial and introduce a strong symmetrical pattern around the Memorial. The circulation system would not retain any existing sidewalks except along the south seawall. The design concept would create distinct landscape spaces for the purpose of preserving the horizontal expanses of lawn flanking the Memorial and providing opportunities for outdoor programs. Integration of the landscape into the visitor experience would include expanded interpretation of cultural resources in the park. High priorities would be: visual and physical access to the Memorial; formal and welcoming entrances and transitions from the

village to the park; and clear connections to important site features.

Specific actions resulting from the implementation of this alternative would include:

### Peace Garden and Entrances to the Park

- Design of the Peace Garden between Hartford and Toledo Avenues would provide visitor entrance to the park with a clear sense of arrival, direction, and welcome. The Peace Garden would provide interpretive wayside exhibits, seating nodes and large shade trees along an oval walkway. The oval would begin at the entrance to Hartford Avenue and terminate with an orientation plaza where visitors would be provided with direction, information, and choices associated with their experience of the park.

- A plaza area would form the terminus of the oval walkway and provide site orientation with a direct view to the Memorial; direction to and through the visitor center; and site furnishings for visitor comfort and orientation.

- A second entrance to the park would be provided at the intersection of Delaware Avenue and Toledo Avenue at the southwest boundary. This access area would provide visitors with orientation; viewsheds to the Memorial; and directions to the visitor center.

### Pedestrian Circulation

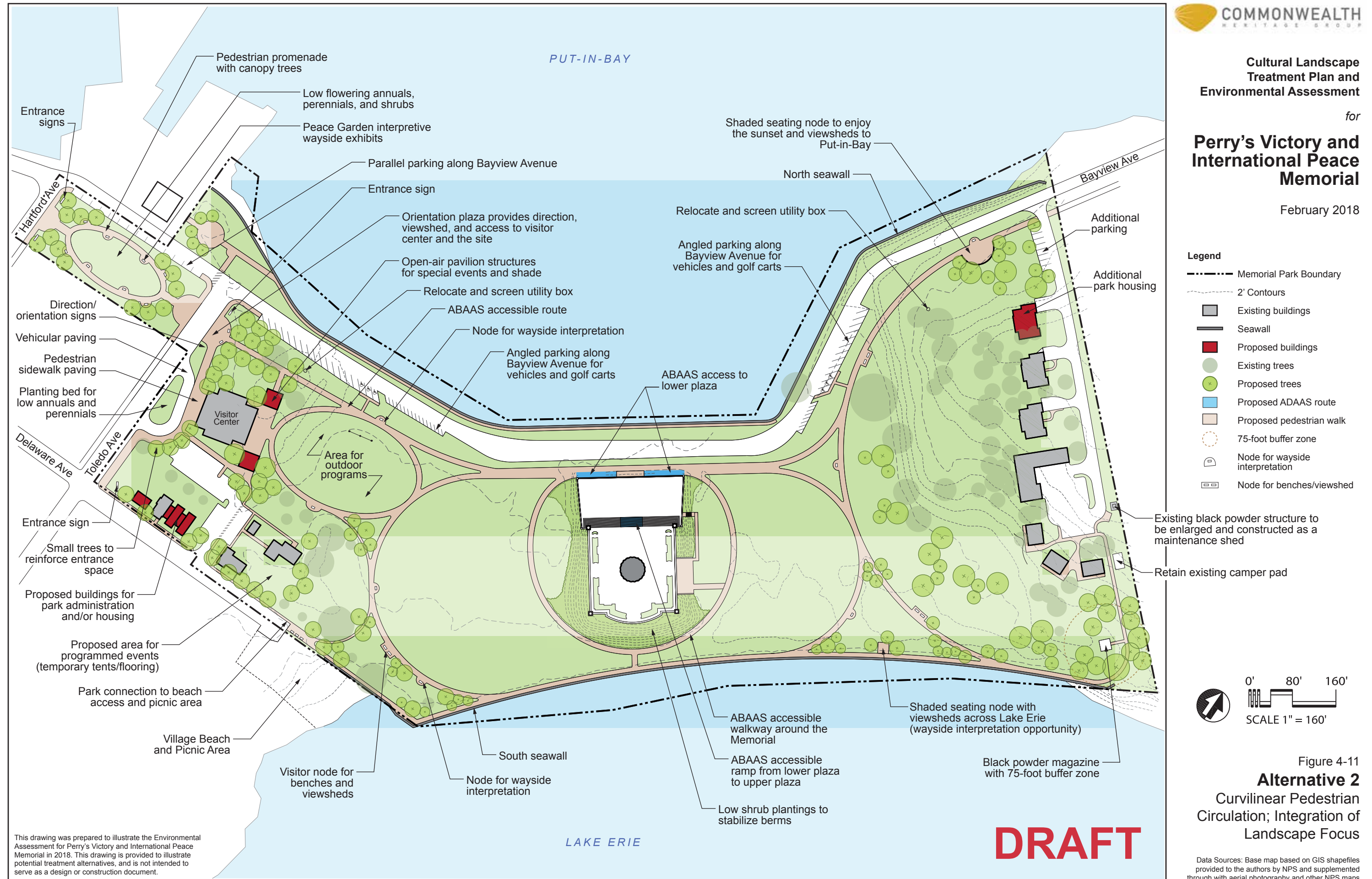
- The circulation system would provide access to the Memorial through a curvilinear pattern of walkways affording the opportunity to integrate the landscape into the visitor experience and expand interpretation of the cultural landscape with wayside exhibits strategically placed in nodes along the sidewalks. Viewsheds would be provided and enhanced with wayside interpretation specific to the themes described in the Long Range Interpretive Plan. The circulation pattern would create smaller landscape spaces conducive to passive recreational activities. Nodes would be located strategically on the sidewalks, providing opportunity for wayside

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International Peace  
Memorial

February 2018







exhibits, benches, and views of the Memorial and surrounding landscape.

- The pedestrian walkway north of the Memorial would extend to the northeast end of the park, providing access to a contemplative node with an open viewshed across the water. The walkway would terminate at the service drive. A small parking area would be provided at the entrance to the service drive.

## **Parking**

- Existing parking associated with the visitor center and park administration building would be retained, with a single entrance/exit from Delaware Avenue.
- The tram loop drive would remain and the interior island of the loop would be planted with an array of colorful annuals, perennials, and grasses.
- Angled parking for vehicles and golf carts would remain on Bayview Avenue north of the Memorial, with sidewalk connections to the major walkway.

## **Vegetation**

- Most of the existing trees in the park would be retained. The Austrian pines would remain around the base of the Memorial until the plaza rehabilitation begins. Construction would require that the Austrian pines be removed. They would not be replaced within this alternative. The grass berms would be stabilized with low-growing shrubs or groundcover.
- The tall birches currently in the loop drive island would be removed in order to allow better visual connection from the park entrances to the visitor center. New vegetation in the island would include colorful annuals, perennials, and grasses.
- Proposed trees would enhance the entrance sequence through the Peace Garden. Trees in this area would provide shade, and enclosure

would accentuate the axial relationship of the pedestrian nodes within the Peace Garden. Character and size of the trees would follow recommendations in the CLTP.

- Proposed trees would function to direct views to the visitor center retaining the viewshed from the orientation plaza to the Memorial column. The trees would be deciduous and smaller than the shade trees in the Peace Garden. Character and size of the trees would follow recommendations in the CLTP.

## **Buildings and Structures**

- Open-air pavilions would be provided east of the visitor center, affording opportunities for group events and programs, shade, and protection from the rain.
- Upper plaza paving would be granite and brick, based on the original Freedlander plans as described in the CLTP.
- Upper plaza panels would be retained and maintained with grass as recommended in the CLTP

## **Alternative 3 Action Alternative (NPS Preferred Alternative)**

### **South Nodes with Lakeside Promenade; Memorial Focus**

*Refer to Figure 4-12: Alternative 3*

The concept for this alternative would retain the designed historic landscape originating in the traditional Beaux Arts style of formal and symmetrical relationships of architecture and the landscape. The relationship of architecture and the landscape would be preserved within a pattern of rectilinear sidewalks near the Memorial reinforcing the contrast of the horizontal landscape with the vertical column. In order to preserve this relationship, a circulation framework would include existing and proposed sidewalk connections throughout the park. Symmetry around the Memorial would be preserved and enhanced by new sidewalks and the horizontal expanse of the open lawn landscape. Additional

new sidewalks would border the edge of the historic core and provide visitors with a more informal connection from the historic core to park features and areas east and west of the Memorial. Goals in this alternative include: visitor amenities and opportunities for expanded interpretation; clear and welcoming transitions from the surrounding community to the park; and a variety of connections to features throughout the park.

Specific actions resulting from the implementation of this alternative include:

### Peace Garden and Entrances to the Park

- Design of the Peace Garden between Hartford and Toledo Avenues would provide a formal visitor entrance to the park with a clear sense of arrival, direction, and welcome. The Peace Garden would provide interpretive wayside exhibits, seating nodes and large shade trees. A formal axial promenade would begin from Hartford Avenue and terminate with an orientation plaza with direction, information, and choices associated with their experience of the park.
- The orientation plaza would provide a direct view to the Memorial and associated wayside interpretation; direction to and through the visitor center; and site furnishings for visitor comfort and orientation.
- A second entrance to the park would be located at the intersection of Delaware Avenue and Toledo Avenue at the southwest corner of the Park. This park access would provide visitors with orientation, viewsheds to the Memorial, welcoming banners, and information.

### Pedestrian Circulation

- The circulation system would provide access to the Memorial through existing sidewalks north and south of the memorial and the existing diagonal walkways. Two additional sidewalks aligned parallel with the Memorial would be added for ease of access to the Memorial and direct connections to the north and south sidewalks. Two additional

curvilinear walkways would be integrated into the plan to provide an informal and shady connection through the trees from the visitor nodes at the south sea wall.

- A node for interpretive wayside exhibits would be provided east of the visitor center and the open air pavilions. Wayside exhibits would be limited to this area and would not be spread over the entire circulation system of the park.
- Three additional visitor nodes would be provided. One node would terminate each diagonal walkway at the south seawall sidewalk and a node would be provided in the northwest corner of the park associated with the sidewalk. Benches would afford visitors expansive viewsheds of the Memorial and the Lake and Bay surrounding the park.

### Parking

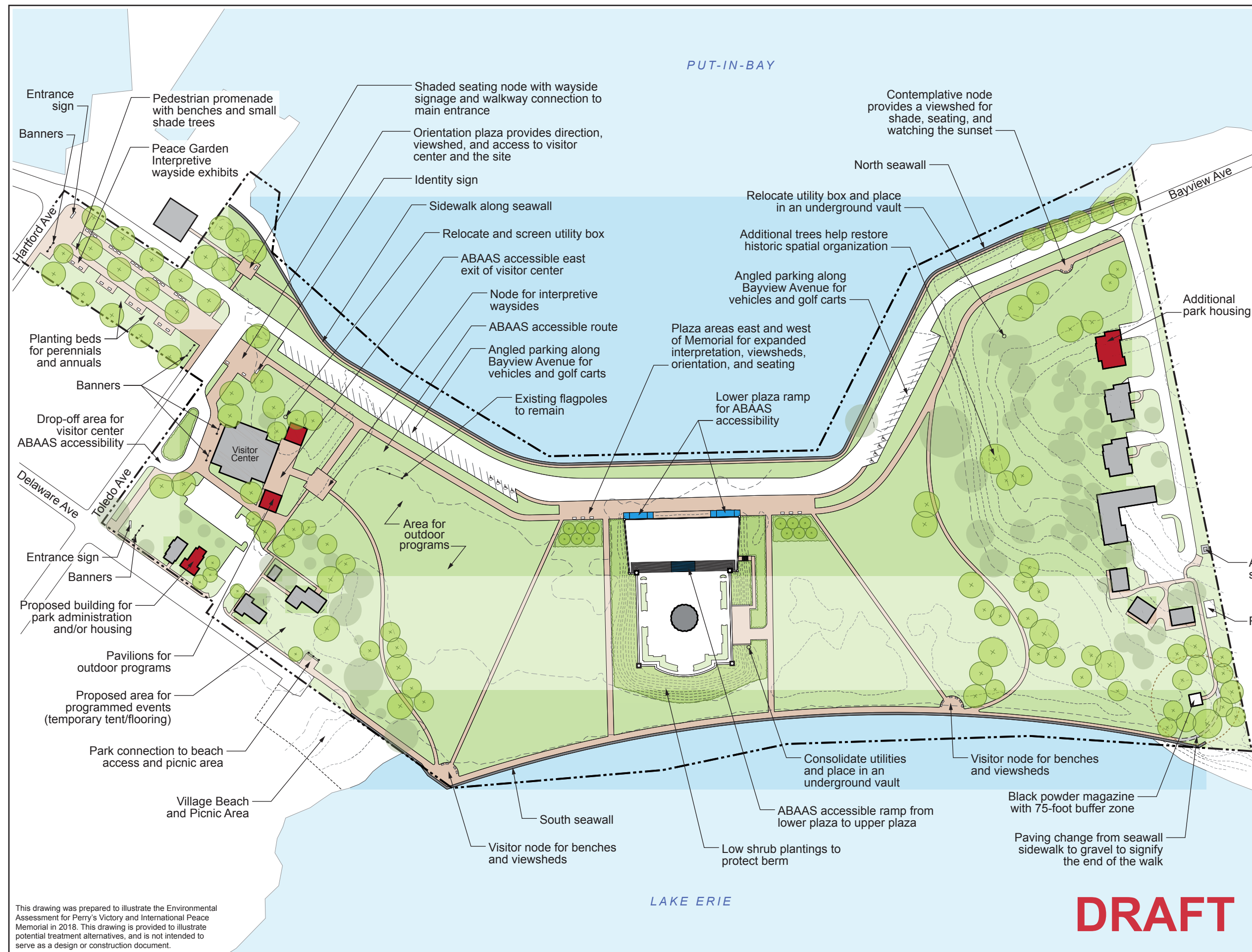
- Existing parking associated with the visitor center and park administration building would be retained, with a single entrance/exit from Delaware Avenue.
- The tram loop drive would remain and the interior island of the loop would be planted with an array of colorful annuals, perennials, and grasses.
- Existing trees would remain in the park unless construction required removal. The Austrian pines around the Memorial would remain until the rehabilitation of the plaza began, requiring their removal. After rehabilitation of the plaza, new trees would be planted flanking each side of the Memorial. The grass berms would be stabilized with low-growing shrubs or groundcover.
- Angled parking on Bayview Avenue would be provided and include ABAAS spaces flanking the Memorial.

### Vegetation

- Most of the existing trees in the park would remain. The Austrian pines would remain

## Perry's Victory and International Peace Memorial

Data Sources: Base map based on GIS shapefiles provided to the authors by NPS and supplemented through with aerial photography and other NPS maps



This drawing was prepared to illustrate the Environmental Assessment for Perry's Victory and International Peace Memorial in 2018. This drawing is provided to illustrate potential treatment alternatives, and is not intended to serve as a design or construction document.

**DRAFT**





around the base of the Memorial until the plaza rehabilitation begins. Construction would require that the Austrian pines be removed. They would be replaced within this alternative with deciduous shade trees. The grass berms would be stabilized with low-growing shrubs or groundcover. Character and size of the trees, shrubs and or groundcovers associated with the Memorial column, plazas, and berms would follow recommendations in the CLTP.

- The tall birches currently in the loop drive island would be removed in order to allow better visual connection from the park entrances to the visitor center. New vegetation in the island would include colorful annuals, perennials, and grasses.
- Proposed trees associated with the entrance sequence through the Peace Garden would provide shade and enclosure accentuating the axial relationship of the pedestrian nodes within the Peace Garden. Character and size of the trees would follow recommendations in the CLTP.
- Proposed trees associated with the visitor center would direct views to the visitor center, provide seasonal color, and retain the viewshed from the orientation plaza to the Memorial column. The trees would be deciduous and smaller than shade trees in the Peace Garden. Character and size of the trees would follow recommendations in the CLTP.
- Proposed trees associated with the preservation of tree massing along the east and west boundaries of the historic core would reflect characteristics of the existing tree plantings and function to augment the sense of definition of the historic Memorial and its landscape setting. Character and size of the trees would follow recommendations in the CLTP.

## **Buildings and Structures**

- Open-air pavilions flanking the rear exit of the visitor center would provide direct access to a

node for new interpretive waysides. These features would expand outdoor programs and events.

- Upper plaza paving would be granite and brick, based on the original Freedlander plan as described in the CLTP.
- Upper plaza panels would be retained and maintained with grass, following recommendations from the CLTP.

## **Selection of the NPS-Preferred Alternative**

The preferred alternative emerged from presentation of the action alternatives during two public scoping sessions and conference calls and reviews with park staff at Perry's Victory and International Peace Memorial. Design sketches and comments from these sessions suggested the preference for Alternative 3. This alternative would preserve the designed historic landscape and retain many of the rectilinear sidewalks currently within the park. Additional sidewalks would be introduced, supporting the symmetry of the original Beaux Arts design intent for the Memorial and its landscape setting. Within the designed landscape, Alternative 3 would afford visitors expanded interpretation through wayside exhibits at the visitor node associated with the visitor center and open-air pavilions. Major goals of the park would be addressed including: ABAAS accessibility to both Memorial plazas, the circulation system, and all buildings except the Memorial column; a formal and welcoming entrance to the park through the Peace Garden; black powder magazine and buffer in compliance with regulations; and extended circulation allowing connections and access to the Memorial and integration of the entire park into the visitor experience.

## **Mitigation**

The National Park Service places strong emphasis on avoiding, minimizing, and mitigating potentially adverse environmental impacts associated with making a change within a historic landscape. To help ensure the protection of

1 natural and cultural resources and the quality of  
 2 the visitor experience at Perry's Victory and  
 3 International Peace Memorial, protective  
 4 measures would be implemented as part of the  
 5 preferred alternative (See Appendix A: Mitigation  
 6 Measures). The NPS would implement an  
 7 appropriate level of monitoring throughout the  
 8 construction process to help ensure that  
 9 protective measures are being properly  
 10 implemented and are achieving their intended  
 11 results (Figures 4-13 and 4-14).



**Figure 4-13:** Stormwater management throughout the park will be addressed with mitigation measures during implementation of the preferred alternative.



**Figure 4-14:** Drainage and separation of utility pipes will be addressed with mitigation measures during implementation of the preferred alternative.

## Affected Environment

This section specifically discusses the resources potentially impacted by implementing the proposed No Action and Action alternatives. The resources discussed below were identified and described as impact topics in Chapter 1 of this document. Identification was based on issues raised by agencies and the public during scoping; existing site conditions; federal laws, regulations and Executive Orders; National Park Service (NPS) Management Policies 2006; topics specified in Director's Order 12 and Handbook; and park specific resource information.

Natural resources examined in detail at Perry's Victory and International Peace Memorial include: geology and soils; water resources/floodplains; vegetation; wildlife; and threatened and endangered species. Cultural resource topics evaluated include: historic buildings and structures; cultural landscapes; and historic viewsheds. The remaining topics examined in detail include visitor use and experience and human health and safety.

## Natural Resources

### Geology and Soils

Ottawa County lies entirely within the glaciated portion of Ohio, and thus its soils are post-glacial in origin. Most of the county, including South Bass Island, lies in the lake plain of glacial Lake Maumee. The lake plain sediments of which the soils are formed are of variable thickness and are underlain by glacial till, which is further underlain by limestone. The dominant limestone outcrops occur primarily in the county's western peninsula and in the islands.<sup>2</sup> The surface of South Bass Island is generally flat (one to six percent slope), though limestone outcrops and knolls are present.

The soils of South Bass Island are of the Castalia-Milton association. These soils are generally well-

<sup>2</sup> Musgrave, Donald K., and George D. Derringer, *1985 Soil Survey of Ottawa County, Ohio*, Soil Conservation Service, U.S. Department of Agriculture, Washington, D.C.

drained, moderately deep, and nearly level to gently sloping. Castalia soils were formed in residuum from fractured limestone and in glacial drift in voids in the bedrock. Castalia soils are very stony, characterized by rapid permeability and low water capacity. Milton soils are characterized as loamy and clayey glacial till over limestone bedrock. Permeability is moderately slow and water capacity is low. Agriculturally, Castalia-Milton soils are best used for orchards, vineyards, and brush.<sup>3</sup>

The majority of the soils present within the boundaries of Perry's Victory and International Peace Memorial are Udorthents which appear as deep, nearly level, and gently sloping soils in cut and fill areas. Earthmoving and grading have mixed or removed the original topsoil and subsoil. The remaining soil is typical of the subsoil and substratum of adjacent soils, Milton silt loam and Castalia very stony, fine sandy loam. In fill areas, such as the Memorial grounds, the soil characteristics are more variable. On the eastern end of the grounds, the topsoil is approximately 6 inches deep, with 18-inch clayey subsoils. Runoff is medium to rapid and hard rains seal the surface in poorly vegetated areas. A seasonally highwater table occurs in depressed or bowl-shaped areas.<sup>4</sup>

Perry's Victory and International Peace Memorial is sited on a low and narrow isthmus (or tombolo) that was originally swampy land. A tombolo is a deposition landform created by wave refraction and diffraction. Since the site was selected in 1911, an almost continuous process of leveling and filling has resulted in a flat and uniform grade. The lowest elevation occurs in the lawn on the west side of the property, just northeast of the superintendent's residence; the highest elevation

occurs outside the historic core along the northeast boundary of the park.<sup>5</sup>

## Water Resources, Floodplains, and Wetlands

Perry's Victory and International Peace Memorial is located on South Bass Island in Lake Erie. The lake is the dominate water resource affecting the park. The level of Lake Erie fluctuates generally between one and three feet during the year. When the lake rises to an elevation between 571 International Great Lakes Datum (IGLD) and 573 IGLD, flooding can result in varying degrees of damage to the memorial, grounds, and facilities. Storms are a problem, combining high lake levels with strong winds, thus driving large amounts of water onto the Memorial grounds (Figures 4-15 and 4-16). Storm damage frequently results in the deposition of debris on the grounds, as well as standing water within the Memorial structure and other park structures. Washouts have occurred at the southwest end of the seawall abutting the village beach and continue to occur after the most recent construction and repair to the south seawall.<sup>6</sup>



**Figure 4-15:** Put-in Bay and the expanse of Lake Erie as seen from the Memorial observation platform.

3 Musgrave, Donald K., and George D. Derringer, *1985 Soil Survey of Ottawa County, Ohio*, Soil Conservation Service, U.S. Department of Agriculture, Washington, D.C.

4 National Park Service, *Perry's Victory and International Peace Memorial, Ohio: Development Concept Plan Revision, Interpretive Prospectus*, 1992, National Park Service, U.S. Department of the Interior, 10.

5 Williams, Sherda K., and Susan Calafate Boyle, *Perry's Victory and International Peace Memorial Put-in-Bay, Ohio: Cultural Landscape Report*, 1994, National Park Service, Midwest Regional Office, Planning and resource Preservation, Omaha, Nebraska, 61.

6 National Park Service, *Perry's Victory and International Peace Memorial, Ohio: Development Concept Plan Revision, Interpretive Prospectus*, 1992, National Park Service, U.S. Department of the Interior, 11-12.





**Figure 4-16:** Lake Erie south of the park as seen from the Ferry as it departs from South Bass Island. The Memorial column can be seen in the distance.

Most of the Memorial lies within the 100 and 500-year floodplains. Only the easternmost portion of the Memorial and a small corner at the southwest boundary are outside the 500-year floodplain.<sup>7</sup> Most standing water accumulating on the site drains in approximately 24 hours. However, the soil in certain low-lying areas of the site remains saturated for more than a week after heavy rains.

Most of the park boundary is within the regulated 100-year floodplain. A 100-year floodplain does not mean that such a flood is likely to occur every 100 years; rather, it means that there is a one-hundred or 1% chance of such a flood occurring in any given year. The functional value of the park floodplain is minimal in that the area has already been developed on many layers of fill, with the construction of the north and south seawalls, the Memorial and grounds, circulation, visitor center, and housing/administration structures. Due to these man-made features and years of excavation and filling, many of the natural functions of the floodplain cannot be carried out, including providing flood storage, providing flood conveyance, providing habitat, reducing excessive erosion, trapping sediments, and removing pollutants from waters.

U.S. Fish and Wildlife Service National Wetland Inventory (NWI) maps were consulted for

classification of wetlands in the park. There are no wetlands identified in the area. Additionally, the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, was consulted for identification of state-listed species including plants found in wetlands. State-listed plants were recorded from the inshore waters of Put-in-Bay and were found on mud flats along the shoreline, but not within the park.

## Vegetation

The park is landscaped with cultivated lawn grasses and ornamental shrubs and trees and is maintained regularly. The grounds have been overlaid with fill material many times since the establishment of the Memorial. Due to poor drainage on the site, standing water has caused the propagation of noxious weeds and undesirable broad-leaved grasses, which create patches of grasses differing in colors and textures.

Vegetation, besides the large expanses of lawn on either side of the Memorial, consists of mature shade trees in clusters or in scattered locations on the site (Figure 4-17). Most of the larger trees present on the site are deciduous and located on the eastern edge of the grass lawn. “It is only on the eastern boundary that the vegetative mass intended to frame the view of the Memorial remains discernable. The loss of vegetative mass



**Figure 4-17:** The historic core is characterized by a horizontal ground plane with an expanse of turf grass. There are deciduous trees west of the Memorial and the Austrian pines are visible around the Memorial plazas.

<sup>7</sup> Ibid, 11.



on the east and west boundaries negatively impacts the feeling of enclosure evoked by the original design.”<sup>8</sup>

There are fifteen Austrian pines growing on the sloped berm around the Memorial plazas. There are all that remain of forty pines specified in the landscape design and planted in 1925. The remaining pines have outgrown their original designed size, and pruning efforts meant to restrain upward growth has robbed them of the clipped, conical shape specified by Freedlander. The remaining trees are reaching the end of their natural life and are scheduled for removal during construction associated with the rehabilitation of the plaza.<sup>9</sup> Tree clusters are also located around the Men’s Dormitory and the Ranger Operations Center in the southwest corner of the historic core. More recent plantings include shade trees associated with the visitor center building, visitor center parking lot, and Park headquarters. Throughout the visitor services zone, there are large beds of colorful annuals and perennials (Figure 4-17).



**Figure 4-18:** Colorful perennials and annuals are located in the visitor center/park administration management zone. Scattered deciduous trees are also prevalent in the landscape.

## Wildlife

Mammals present on South Bass Island include: raccoon (*Procyon lotor*); muskrat (*Ondatra zibethicus*); mouse (*Mos musculus*); eastern cottontail (*Sylvilagus floridanus*); eastern gray squirrel (*Sciurus carolinensis*); black squirrel (*Sciurus meridionalis*); and red fox (*Vulpes vulpes*). Birds observed nesting on the memorial grounds include robins (*Erithacus rubecula*), grackles (*Quiscalus quiscula*), and song sparrows (*Melospiza melodia*). Additionally, other species observed feeding on the memorial grounds, include: killdeer (*Charadrius vociferous*); crow (*Corvus corax*); downy woodpecker (*Picoides pubescens*); red-eyed vireo (*Vireo olivaceus*); starling (*Sturnus vulgaris*); red-winged blackbird (*Agelaius phoeniceus*); double-crested cormorants (*Phalacrocorax auratus*); and yellow-shafted flicker (*Colaptes auratus*). Purple martins (*Progne subis*) are present at Scheeff East Point Nature Preserve on South Bass Island. These birds east of the Rockies only nest in man-made housing which include both natural and plastic gourds. The island location in Lake Erie provides plenty of flying insects for food and open habitat, at least 40 feet from tall trees (where large avian predators scout for smaller prey). Incidental visitors to the memorial include migrating mallard (*Anas platyrhynchos*) and Canada geese (*Branta canadensis*).<sup>10</sup>

Numerous species of amphibians and reptiles have been recorded on South Bass Island and in adjacent waters. Several freshwater mussel species (*Margaritifera margaritifera*) inhabit the waters around the memorial. Ninety-five species of fish have been recorded for Ottawa County, a few include: alewife (*Alosa Pseudoharengus*); cisco (*Coregonus artedi*); lake whitefish (*Coregonus clupeaformis*); darters (*Sympetrum Striolatum*); sunfish (*Mola mola*); walleye (*Sander vitreus*); small

<sup>8</sup> National Register of Historic Places Registration Form, (2014), Section 7, page 12.

<sup>9</sup> Ibid.

<sup>10</sup> National Park Service, 1992 *Perry’s Victory and International Peace Memorial, Ohio: Development Concept Plan Revision, Interpretive Prospectus*. National Park Service, U.S. Department of the Interior, 8.

mouth bass (*Micropterus dolomieu*); and Yellow perch (*Perca flavescens*).<sup>11</sup>

### **Rare, Threatened, and Endangered Species**

The U. S. Fish and Wildlife Service (USFWS) Ohio Ecological Services has identified the federally-listed species, proposed species, candidate species and designated and proposed critical habitat present or potentially present at Perry's Victory and International Peace Memorial. USFWS offered the comments pursuant to the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347), and the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1544).

**Species of Concern.** The project lies within the range of the monarch butterfly (*Danaus plexippus*). The USFWS has determined that listing under the ESA may be warranted and is currently conducting a status review of the monarch. Monarch butterflies are found throughout Ohio and some populations migrate vast distances across multiple generations each year. The Lake Erie islands provide important migration and stopover habitat for monarchs as they fly between the U.S., Mexico and Canada—a journey of over 3,000 miles.

The project boundary lies within the range of the Lake Erie watersnake (*Nerodia sipedon insularum*), a state endangered species, and a Federal species of concern that was recently removed from the Federal list of Endangered and Threatened Wildlife and Plants due to recovery. The watersnake is found on the offshore islands and in adjacent water of Lake Erie. Watersnake summer habitat consists mainly of rocky shorelines with adjacent vegetation and shoreline structures such as crib docks. Winter hibernation habitat for the watersnake includes the island interior and the shoreline/vegetation interface.

**Federally Listed Species.** All projects in the State of Ohio lie within the range of the federally endangered Indiana bat (*Myotis sodalist*) and the

federally threatened northern long-eared bat (*Myotis septentrionalis*).

In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost and forage and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as building, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

The proposed project lies within the range of the Kirtland's warbler (*Setophaga kirtlandii*), a federally listed endangered species. The Kirtland's warbler is a small blue-gray songbird with a bright yellow breast. This species migrates through Ohio in the spring and fall, traveling between its breeding grounds in Michigan, Wisconsin, and Ontario and its winter grounds in the Bahamas. While migration occurs in a broad front across the entire state, approximately half of all observations in Ohio have occurred within 3 miles of the shoreline of Lake Erie. During migration, individual birds usually forage in shrub/scrub or forested habitat and may stay in one area for a few days.

## **Cultural Resources**

### **Historic Buildings and Structures**

Perry's Victory and International Peace Memorial is nationally significant under Criterion C in the area of architecture for embodying the distinctive

<sup>11</sup> *Ibid.*

characteristics of a type and period and because it represents the work of a master. The centerpiece of the Memorial is the massive Doric column of Milford pink granite topped by an immense bronze lantern. Its rotunda, located within the granite shaft features a domed ceiling, above which an elevator transports visitors to the observation platform. The surrounding plazas are constructed of reinforced concrete faced with granite. The upper and lower plazas are connected by a grand staircase, that occupies the full length of both plazas. The Memorial Column, plazas, and connecting stairs are considered one contributing feature.<sup>12</sup> Additional structures or small-scale features associated with the Memorial that are also contributing include: granite walls associated with the plazas; granite benches and urns located at the corners of the upper plaza; and the structured berm surrounding the lower plaza (Figure 4-19). The Memorial and its grounds are an excellent example of the harmony of building and landscaping that is integral to the Beaux Arts style in America, with its monumental classicism in architecture set within a designed, formal landscape. Although the entire design for the site by architects Joseph H. Freedlander and Alexander D. Seymour was never completely executed, the portions that were constructed have generally retained their integrity and are true to the formal, axial design and classical architecture typical of Beaux Arts style.

The Superintendent's Residence and garage were built in 1951. A Neo-Colonial Revival-style building, the Superintendent's Residence, now the Men's Dormitory for seasonal employees, is a story-and-a-half, compound-plan building, constructed over a crawlspace, with a central door and stoop on the front side of the main block and on the west (and only) wing of the building. It remains in its original location and is in close proximity to the Ranger Operations Center. Though it is no longer used as the Superintendent's Residence, it continues to



**Figure 4-19:** The upper plaza of the Memorial forms its base. Granite urns are in each corner of the upper plaza.

function in its historic use as a residence for park personnel in its capacity as a Men's Dormitory for seasonal employees. It speaks to the historic and continuing administrative needs of the park. For these reasons, it is a contributing building on the historic site. The original garage associated with the building has been demolished. The gable-roofed storage building now adjacent to the Men's Dormitory, does not constitute a replacement of the original garage and is a non-contributing feature of the site.<sup>13</sup>

The north and south seawalls are listed in the National Register of Historic Places as non-

12 National Register of Historic Places Nomination Form, Section 7 page 15-16.

13 Harvey, Deborah E. Outside The Box, LLC, *National Register of Historic Places Registration Form for Perry's Victory and International Peace Memorial*, (2014), Put-in-Bay, Ohio. Section 7, page 16.



**Figure 4-20:** Memorial column is seen in the distance. The South seawall forms the south boundary of the historic core.

contributing due to the significant changes made to them over the years. The sidewalk at the south seawall is also non-contributing due to its change in locations when the eastern half of the south seawall was relocated in 1977.<sup>14</sup> The seawalls, however, are compatible because they replaced walls that defined the original boundaries of the historic site and help retain the original design intentions of the architects (Figure 4-20).

### Cultural Landscapes

The flat, grassy expanse of the site is defined on the east by a ragged treeline, bisected by the paving of the memorial plazas, crisscrossed by walkways to facilitate visitor traffic, and punctuated by

specimen trees and groups of tree plantings. The most prominent vegetative feature of the site, however, is the flat, grassed lawn, a mixture of grasses, clover, and weeds watered by an irrigation system. The architects specified a mixture of several types of grasses and white clover in the earliest landscape design, but it is unknown whether that was ultimately the mix planted or if any of the original grasses remain. Nevertheless, the wide, flat horizontal expanse of grass as a visual counter to the verticality of the memorial column was integral to the original design concept. It exists today essentially as designed.<sup>15</sup>

In addition, the planter beds located on the upper plaza were specified as beds of grass, called grass panels in the original design. As grass panels, they would carry the overall effect of the horizontal plane of the lawn onto the plaza. Although planted in barberry hedging between 1925 and 1933, they have been planted in grass, per the original design, since the removal of the barberry hedges beginning in the mid-1930s. Planting of grass in the planter beds has been the historic treatment since the mid-1930s and matches the historic design.<sup>16</sup>

Vegetation, besides the grassy expanses of lawn on either side of the Memorial, consists of mature shade trees in clusters or in scattered locations on the site. Most original vegetation was cleared for construction of the column in 1912. The architects apparently intended that some of the existing trees would be left standing after the site was cleared, but there is no photographic evidence that this was done. However, some of the trees recorded in 1994 as part of the *Cultural Landscape Report* appear to be of a size that could indicate that they date from before 1912. Although the exact ages of these trees were not determined, all the remaining trees should be considered features associated

<sup>14</sup> Ibid. Section 7, page 13-14.

<sup>15</sup> Ibid. Section 7, page 11.

<sup>16</sup> Ibid.



1 with the Period of Significance due to their  
2 probable age based on their size.<sup>17</sup>

3 Perry's Victory and International Peace Memorial  
4 is locally significant under Criterion C in the area  
5 of landscape architecture for embodying the  
6 distinctive characteristics of a type and period  
7 adapted to the special landscaping needs of an  
8 island in a northern lake. Freedlander and  
9 Seymour created a Beaux Arts landscape design to  
10 complement the Beaux Arts architectural style of  
11 the Memorial building(s) (Figure 4-21). The  
12 designed cultural landscape of the Perry's Victory  
13 and International Peace Memorial retains integrity  
14 of location, design, setting, materials,  
15 workmanship, feeling, and association<sup>18</sup> (Figure 4-  
16 22).

### 17 Historic Viewsheds

18 The architects of the memorial building, Joseph  
19 Henry Freedlander and Alexander Duncan  
20 Seymour, planned the arrangement of the grounds  
21 surrounding it to create the views, vistas, and  
22 viewsheds. They arranged the landscaping and  
23 small-scale features of the grounds to create  
24 artistic views of the Memorial as well as views  
25 from the Memorial. The original plan organized  
26 the landscape of the grounds to focus all visual  
27 attention on the column. The unobstructed views  
28 across the grass lawns were contrived by the  
29 architects to wrest an impression of vast space  
30 from a relatively small plot of ground.<sup>19</sup> These  
31 views from inside the park to the Memorial  
32 column are intact today (Figures 4-23 and 4-24).

33 The most striking and significant view of the  
34 Memorial, as planned by the architects, is the  
35 approach from the lake on the north, where the  
36 Memorial column appears to rise almost directly  
37 from the waters of Lake Erie. This view looking  
38 toward the Memorial, is currently protected by the  
39 U.S. Army Corps of Engineers, which prevents



**Figure 4-21:** View to the cultural landscape west of the Memorial column and plazas. Large expanse of lawn covers the horizontal ground plane that is part of the original design intent for the Memorial and its landscape setting.



**Figure 4-22:** View to the cultural landscape east of the Memorial column and plazas. Lawn continues to the east, and trees form a sense of enclosure that help define the historic core.

40 boats from permanently anchoring in the harbor  
41 in front of the Memorial.

42 The view northwest from the Memorial  
43 observation platform near the top of the column  
44 affords the best opportunity to see the area where  
45 the Battle of Lake Erie was fought in 1813.  
46 Obstructions are starting to occur from extension  
47 of existing boat docks and construction of new  
48 docks in Put-in-Bay which is not within the

17 Sherda K. Williams and Susan Calafate Boyle, *Perry's Victory Memorial Cultural Landscape Report for Perry's Victory and International Peace Memorial, Put-in-Bay, Ohio* (Denver: United States Department of the Interior, National Park Service, Denver Service Center, 1994), 96.

18 Harvey, Deborah E., Outside The Box, LLC, *National Register of Historic Places Registration Form for Perry's Victory and International Peace Memorial*, (2014), Put-in-Bay, Ohio. Section 7, page 11.

19 Ibid. Section 7, page 10.





**Figure 4-23:** Historic photograph (1950) from the park archives shows a grand view from Bayview Avenue toward the Memorial.



**Figure 4-24:** Approximately the same view in 2017, with powerlines cluttering the grand view to the Memorial from Bayview Avenue.

1 boundaries of the park or under the control of the  
2 National Park Service.<sup>20</sup>

3 **Visitor Use and Experience**

4 **Affected Environment**

5 The actions described in the alternatives are within  
6 Perry's Victory and International Peace Memorial  
7 which is located on South Bass Island in Lake Erie  
8 near the U.S. – Canadian border. The site lies  
9 within the Village of Put-in Bay, Township of Put-  
10 in-Bay, in Ottawa County, Ohio. Port Clinton and  
11 Sandusky are the closest mainland communities.  
12 Visitors to the park reach South Bass Island by  
13 ferry or private boats. There is a small air strip on  
14 the island with small airplane service, but this is  
15 mode of transportation is not for large scale

16 visitation to the park. Most visitors are from the  
17 state of Ohio.<sup>21</sup>

18 **Visitor Experience and Interpretation:**

19 Perry's Victory and International Peace Memorial  
20 has two visitor contact stations—the memorial and  
21 the visitor center—and 25 acres of groomed  
22 landscape between two seawalls. When open, the  
23 memorial is the main attraction for park visitors  
24 with approximately 150,000 visiting each season.  
25 The visitor center is now the primary contact  
26 station. Rangers, volunteers, and Eastern National  
27 associates welcome visitors, provide orientation to  
28 the memorial and the island, and deliver informal  
29 interpretation. The visitor center has an  
30 auditorium with a 15-minute DVD presentation  
31 on the battle of Lake Erie.

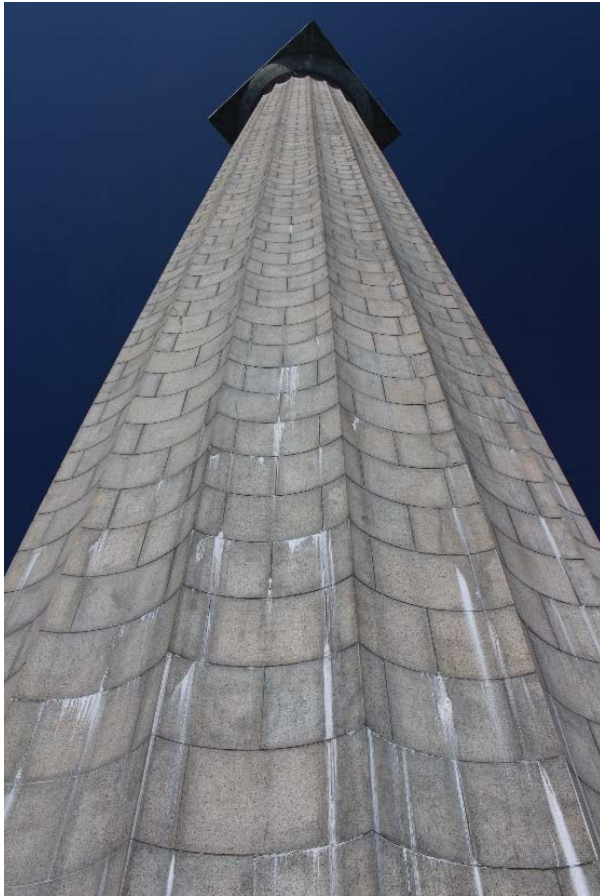
20 Ibid.

21 *Perry's Victory and International Peace Memorial Visitor Study*, University of Idaho, Social Science Program U.S. Department of the Interior, National Park Service, 2009, 43.

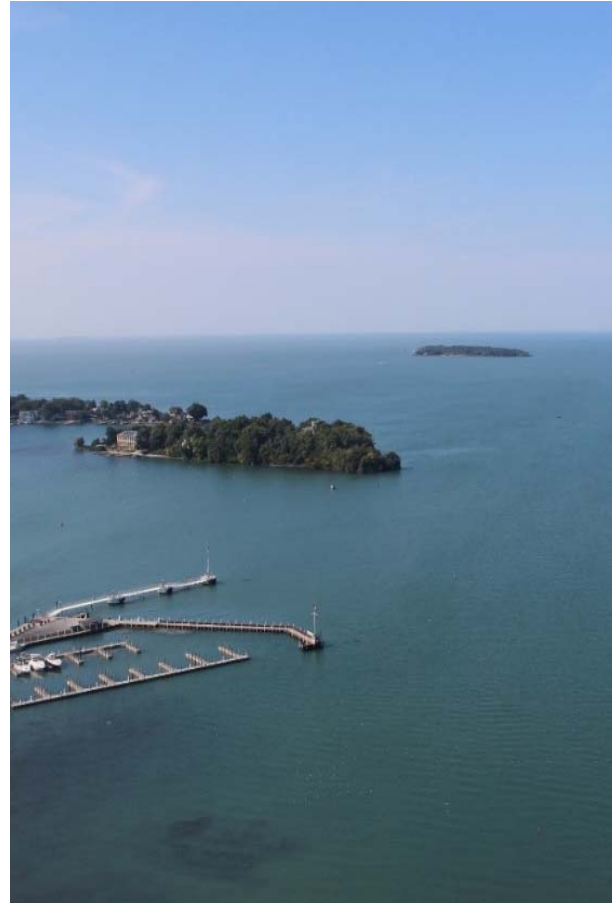
1 The core interpretive programs for Perry's Victory  
 2 are children's programs offered twice daily, hourly  
 3 talks, evening programs three times a week, living  
 4 history encampments, black powder musket firing  
 5 demonstrations on weekends and cannonade  
 6 firings one weekend a month. The park also hosts  
 7 several special events throughout the summer  
 8 months, each with interpretive/educational  
 9 components. Interpretive staff present programs  
 10 off-island at Ohio and Michigan schools, civic  
 11 groups, and other venues. The park continues to  
 12 expand its education and community outreach.<sup>22</sup>

13 Visitors enter the Memorial column through the  
 14 rotunda, where six officers from the War of 1812

15 are interred. Once inside the rotunda, visitors  
 16 travel to the top of the column via steps and an  
 17 elevator to a viewing platform (Figure 4-25). From  
 18 this platform visitors can see across Lake Erie to  
 19 the site of the naval battle (Figure 4-26). At the  
 20 visitor center, a film can be viewed, along with  
 21 exhibits interpreting the Battle of Lake Erie and  
 22 the building of the Memorial column and plazas.  
 23 In summer months, the landscaped grounds of the  
 24 park provide an open space that serves as a calm,  
 25 contemplative escape from the otherwise  
 26 energetic, busy island and as a recreational space  
 27 for both visitors and local island residents.<sup>23</sup>



**Figure 4-25:** View toward the top of the column as seen from the plaza. A large doorway marks the entrance to the column.



**Figure 4-26:** View from the observation platform at the top of the Memorial column. Interpretive maps are provided on the platform.

22 *Perry's Victory and International Peace Memorial Long-Range Interpretive Plan*, Harpers Ferry Center, U.S. Department of the Interior, National Park Service, October 2011. p 21.

23 *Foundation Document: Perry's Victory and International Peace Memorial*, U.S. Department of the Interior, National Park Service, October 2012. p 2.

## Human Health and Safety

Numerous conditions at the park require continual attention by management personnel to ensure the safety of visitors. Park personnel are vigilant about visitor safety issues such as the potential for severe summer weather—heat and humidity, storms and flooding, and the presence of biting insects. Ongoing maintenance of pedestrian sidewalks and roads, exhibits, site furnishings, buildings, and vegetation are only part of the comprehensive work required to ensure the health and safety of the public. Park staff monitor use of golf carts on the pedestrian sidewalks, a potential safety hazard for visitors strolling throughout the park. Staff is also responsible for the safety of visitors once they are inside the Memorial column and reach the observation platform.

Vegetation management is ongoing and requires removal of fallen limbs and debris. Maintenance of trees is essential in order to prevent hazardous conditions for visitors. The park is also vigilant about the safety of visitors entering the park at traffic intersections and crossing Bayview Avenue north of the Memorial in order to access the north seawall.

## Environmental Consequences

The National Environmental Policy Act requires that environmental documents discuss the environmental impacts of a proposed federal action, feasible alternatives to that action, and adverse environmental impacts that cannot be avoided if a proposed action is implemented. In this case, the proposed federal action is the implementation of treatment recommendations contained in the Cultural Landscape Treatment Plan (CLTP) for Perry's Victory and International Peace Memorial and the identification and disclosure of potential impacts and effects of the developed alternatives in order to fulfill all compliance requirements. This chapter analyzes and compares the environmental impacts on natural resources, cultural resources, visitor use and experience, and human health and safety. This analysis compares the baseline of the "No Action" alternative against the action alternatives to

determine positive and adverse outcomes. By examining the environmental consequences of the alternatives on an equivalent basis, decision makers can evaluate which approach would create the most desirable combination of benefits with the fewest adverse effects on the park.

This section begins with a brief explanation of general methods followed by a discussion of how cumulative impacts are analyzed for the alternatives. Following this section, the impact analysis is presented. Each of the alternatives, including the no action alternative (continuation of current management), is analyzed for adverse or positive changes that would occur to the existing conditions of each impact topic as presented in the affected environment chapter of this document. After describing the impacts of the alternatives, the cumulative impacts on each impact topic are discussed.

## General Methods and Assumptions for Analyzing Impacts

This section describes the environmental impacts for each alternative. The analysis assumes that the monitoring and mitigation measures identified in the alternative development section of this document would be implemented for the action alternative. Overall, the National Park Service based its impact analyses and conclusions on review of existing literature and park studies, information provided by experts within the park and other NPS personnel, other agencies, professional judgment, park staff insights, and public input.

In accordance with Council of Environmental Quality (CEQ) regulations, direct, indirect, and cumulative impacts are described (40 CFR 1502.16), and the impacts are assessed in terms of context and intensity (40 CFR 1508.27). Where appropriate, mitigating measures for adverse impacts are described and incorporated into the evaluation of impacts. The specific methods used to assess impacts for each resource may vary and, therefore, are described as part of each impact topic.

The following terms are used in the discussion of environmental consequences to assess the impact intensity threshold and the nature of impacts associated with each alternative.

▪ **Type.** Impacts can be positive or adverse. A positive impact is an impact that would result in a favorable change in the condition or appearance of the resource. An adverse impact is an impact that causes an unfavorable result to the resource as compared with the existing conditions.

▪ **Context.** The significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, the locality and the park. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance usually would depend on the effects in the locale rather than in the world as a whole. In many cases, the term “localized” is used, intending to provide the context that impacts would only occur within a relatively small area (i.e., a few acres) as opposed to throughout the park or into neighboring areas. The term “local” is used to reference the entire park. Both short- and long-term effects are also relevant.

▪ **Duration.** Duration of impact is analyzed independently for each resource because impact duration is dependent on the resource being analyzed. Impacts may last for the implementation period, a single year or growing season, or longer. Impact duration is described as short term, long term, or permanent for each resource. For the purposes of this analysis, short-term and long-term impacts are defined for each resource.

▪ **Direct and Indirect Impacts.** Effects can be direct, indirect, or cumulative. Direct effects are caused by an action and occur at the same time and place as the action. Indirect effects are caused by the action and occur later or further away but are still reasonably foreseeable. Direct and indirect impacts are considered in this analysis. Cumulative impacts are considered in this analysis.

▪ **Intensity.** This refers to the severity of impact. The following should be considered in evaluating intensity:

- Impacts that may be both positive and adverse. A significant effect may exist even if the federal agency believes that on balance the effect will be positive.
- The degree to which the proposed action affects public health or safety.
- Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- The degree to which the action may establish a precedent for future actions having significant effects or represents a decision in principle about a future consideration.
- Whether the action is related to other actions that have individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in, or eligible for listing in, the National Register or may cause loss or destruction of significant scientific, cultural, or historical resources.



- The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
- Whether the action threatens a violation of federal, state, or local law or requirements imposed for protection of the environment.

For each impact topic analyzed, an assessment of the potential impacts according to context and intensity is provided in the “Conclusion” section that follows the discussion of the impacts under each alternative. The intensity of the impacts is presented using the relevant factors from the preceding list. Intensity factors that do not apply to a given resource topic and/or alternative are not discussed.

## Climate Change

The impacts of climate change on Perry’s Victory and International Peace Memorial are not expected to vary by alternative, and the lack of certainty about regional climate change adds to the difficulty of predicting how these impacts would be realized. Furthermore, management actions that are inherently part of each alternative would not fundamentally change with the anticipated added impacts of climate change. Climate change is one factor among many that cause similar outcomes between the alternatives, so management actions would not likely be taken due to climate change alone. Given this complexity, the potential influences of these changes on the park environment are not analyzed in detail with respect to each alternative in this chapter. Please refer to the discussion of carbon footprint topic in the Chapter 1 section, “Impact Topics Considered but Not Retained for Full Analysis.”

In June 2015, NPS developed and distributed a brief entitled “Park Visitation and Climate Change.” The brief states that:

climate change will affect not only natural and cultural resources within national parks, but also visitation patterns. Where, when, and how many people visit parks is likely to change with

continued warming. Understanding potential change in visitation based on historical trends and future patterns of temperature change is a crucial first step for park managers and local communities to anticipate, plan for, and proactively affect future visitation. A changing climate is likely to have cascading and complex effects on park visitation, management, and local economies. Parks and surrounding communities will need to adapt to both the challenges and opportunities posed by changing visitation.”

Park staff will use this information and further research to base any required management procedures due to changes in visitation. Further concerns associated with climate change are the potential rise in the water levels of Lake Erie and potential effects of coastal wave action and flooding.

## Impacts to Cultural Resources and Section 106 of the National Historic Preservation Act

In this EA, impacts on cultural resources are described in terms of type, context, duration and intensity, which is consistent with the regulations of the Council on Environmental Quality (CEQ) that implement the National Environmental Policy Act (NEPA). These impact analyses are intended, however, to comply with the requirements of both NEPA and Section 106 of the National Historic Preservation Act. In accordance with the Advisory Council on Historic Preservation’s regulations implementing Section 106 (36CFR Part 800, *Protection of Historic Properties*), impacts on cultural resources were also identified and evaluated by (1) determining the area of potential effects; (2) identifying cultural resources present in the area of potential effects that are either listed in or eligible to be listed in the National Register of Historic Places; (3) applying the criteria of adverse effect to affected National Register eligible or listed cultural resources; and (4) considering ways to avoid, minimize, or mitigate adverse effects.

Under the Advisory Council’s regulations, a determination of either *adverse effect* or *no adverse effect* must be made for affected National Register listed or eligible cultural resources. An *adverse*

effect occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualifies it for inclusion in the National Register, e.g., diminishing the historic integrity (or the extent to which a resource retains its historic appearance) of its location, design, setting, materials, workmanship, feeling, or association. Adverse effects also include reasonably foreseeable effects caused by the alternatives that would occur later in time, be farther removed in distance, or be cumulative (36 CFR 800.5, *Assessment of Adverse Effects*). A determination of no adverse effect means there is an effect but the effect would not diminish the characteristics of the cultural resource that qualify it for inclusion in the National Register of Historic Places

CEQ regulations and the National Park Service's *Conservation Planning, Environmental Impact Analysis and Decision Making* (Director's Order #12) also call for a discussion of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact, e.g., reducing the intensity of an impact from major to moderate or minor.

Any resultant reduction in intensity of impact due to mitigation; however, is an estimate of the effectiveness of mitigation only under NEPA. It does not suggest that the level of effect as defined by Section 106 is similarly reduced. Cultural resources are nonrenewable resources, and adverse effects generally consume, diminish, or destroy the original historic materials or form, resulting in a loss in the integrity of the resource that can never be recovered. Therefore, actions determined to have an adverse effect under Section 106 may be mitigated but the effect can remain adverse.

A section 106 summary is included, as appropriate, in the impact analysis sections. Section 106 summary is an assessment of the effect of the undertaking (implementation of the alternative) on National Register of Historic Places eligible or listed cultural resources only, based upon the criterion of adverse effect and no adverse effect found in the Advisory Council's regulations.

## Cumulative Impacts Analysis Method

### Definition

The CEQ regulations require assessment of cumulative impacts in the decision-making process for federal projects. A cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions" (40 CFR 1508.7). Cumulative impacts are considered for all alternatives, including the no-action alternative. Cumulative impacts can result from individually minor, but collectively positive or adverse actions taking place over a period of time.

### Methods for Assessing Cumulative Impacts

Cumulative impacts were determined by combining the impacts of the action alternative and the no action alternative with other past, present, and reasonable foreseeable future action. Past actions include activities that influenced and affected the current conditions of the environment near the project area. Ongoing or reasonably foreseeable future projects near the park or the surrounding region might contribute to cumulative impacts. The geographic scope of the analysis includes actions in the project area as well as other actions in the park or surrounding lands, where overlapping resource impacts are possible. Once identified, past, present, and reasonably foreseeable actions are then assessed in conjunction with the impacts of the alternatives to determine if they would have any added adverse or positive impacts on a particular resource, human health and safety, or visitor use and experience. The impacts of past, present and reasonably foreseeable actions vary for each resource. Cumulative impacts are considered for each alternative and are presented in the environmental consequences discuss for each impact topic.

## Actions and Projects Inside Perry's Victory and International Peace Memorial

In order to determine the potential cumulative impacts, the following existing and anticipated present and future projects at Perry's Victory and International Peace Memorial were taken into consideration:

- Past, present, and ongoing vegetation management including: mowing the expanse of lawn in the historic core and the housing/maintenance management zones and pruning, shearing, and general tree and shrub maintenance;
- Past, present and future projects associated with expanded interpretation and placement of interpretive waysides and associated collateral infrastructure such as paving and viewsheds;
- Past, present and future projects associated with improvements to accessibility to primary visitor use facilities;
- Currently in progress (2017 season) is repointing of the Memorial column – PMIS 210919. With completion of this project, the memorial column itself should be in good condition for the long term.
- Upper plaza: Value Analysis (PMIS 200284) was completed in 2015. This is a high priority item for the park, so that the Upper Plaza can be returned to full public use. The park may also implement mechanical improvements (e.g., geothermal heating) as part of the same project.
- Seawalls: The condition assessment report completed in February 2017; park would like to have this as a Line Item Construction project to repair and restore the north (1900') and south (1500') seawalls within the park in the next five years.
- Park Accessibility Plan, currently underway and scheduled to be completed in 2018.

## Actions and Projects Outside Perry's Victory and International Peace Memorial

One specific project outside Perry's Victory and International Peace Memorial was identified by park staff. A boat dock was recently constructed immediately south of the bathing beach. Reasonably foreseeable impacts from additional projects outside the park might be associated with road expansion along the park boundaries and development of the land that surrounds the park.

## Natural Resources

### Soils and Geology

#### ALTERNATIVE 1: (NO ACTION)

##### Impacts

Within this alternative, there would be no changes to current conditions. Existing management or maintenance strategies would remain in place and include controlling erosion and deposition of sediment, limiting visitor access, and avoiding construction of new features or facilities that might cause soil conditions or stability to change or accelerate. Current mitigation measures for sensitive natural resources would remain in place and include soils and geology. There would be no adverse impacts to soils and geology resources with the implementation of this alternative.

##### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. None would have an adverse impact on soils and geology. The incremental impact of the no action alternative when added to other past, present, and reasonably foreseeable future actions would be negligible.

##### Conclusion

The No Action Alternative would not modify the existing soils or geology conditions at Perry's Victory and International Peace Memorial. No adverse impacts to soil and geologic resources would be expected.

## **ALTERNATIVE 2: (PROPOSED ACTION)**

### Impacts

Due to construction projects introduced within this alternative, soils would be disturbed by the development, but cut and fill activity would be minimal and spread over the park acreage. In Alternative 2, the introduction of impervious materials would exceed that of Alternative 3. The soils that would be disturbed by demolition and development are extensive but they are fill soils, previously added on park management zones and specifically in the historic core. Cut and fill amounts would be balanced to the extent possible to minimize the need to import or export soils during construction. Additionally, under Alternative 2, the cut and fill of soils on the grounds would be designed to result in no net change in the soil loads surrounding the Memorial. Overall, the implementation of Alternative 2 would have short-term and minor impacts on existing soil conditions at the park.

The generally flat topography of the park would be retained in Alternative 2, diminishing potential increase of erosion on the landscape. During demolition of existing sidewalks and construction of new ones, temporary impacts to soils from erosion would be minimized by implementation measures listed below. Project phasing would aid in mitigation of the extent of soil disturbed at one time.

### Mitigation

- In order to minimize the potential for temporary erosion impacts to soils during construction, erosion and sediment control measures would be implemented for each project undertaken for construction.
- In order to minimize the potential for long-term impacts to soils, a strategy for implementation priorities and phasing of the proposed actions to allow sufficient time for re-stabilization of soils would be developed after completion of each phase.
- When soil excavation is an unavoidable part of an approved facility development project, NPS

would minimize soil excavation, erosion, and offsite soils migration during and after the activity.

- An Erosion and Sediment Control Plan would be developed before starting the project, including the specific practices to be implemented for controlling erosion and preventing management-caused sediment from reaching the drainage. Compliance would be ensured by frequent inspections.

### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. None would have an adverse impact on soils and geology. The incremental impact of the action alternative when added to other past, present, and reasonably foreseeable future impacts would be localized by use of project phasing.

### Conclusion

There would be a number of disruptions to surface soils due to the proposed actions in this alternative. The result would be short-term minor adverse impacts to soils. Most impacts would be localized due to project phasing. Long-term positive impacts to soils would be expected due to soil stabilization, design of walkway alignments to avoid slopes and minimal ongoing soil erosion maintenance associated with all park project activities.

## **ALTERNATIVE 3: (PROPOSED ACTION NPS-PREFERRED)**

### Impacts

Due to construction projects introduced within this alternative, soils would be disturbed by the development, but cut and fill activity would be minimal and spread over the park acreage. The soils that would be disturbed by the development are fill soils that were previously added on park management zones and specifically in the historic. Cut and fill amounts would be balanced to the extent possible to minimize the need to import or export soils during construction. Additionally, under Alternative 3, the cut and fill of soils on the



grounds would be designed to result in no net change in the soil loads surrounding the Memorial. Overall, the implementation of Alternative 3 would have short-term and minor impacts on existing soil conditions at the park.

The generally flat topography of the park would be retained in Alternative 3 diminishing the potential for erosion on the landscape. During construction, temporary impacts to soils from erosion would be minimized by implementation measures listed below.

#### Mitigation

- In order to minimize the potential for temporary erosion impacts to soils during construction, erosion and sediment control measures would be implemented for each project undertaken for construction.
- In order to minimize the potential for long-term impacts to soils, a strategy would be developed for implementation priorities and phasing of the proposed actions to allow sufficient time for re-stabilization of soils after completion of each phase.
- When soil excavation is an unavoidable part of an approved facility development project, NPS would minimize soil excavation, erosion, and offsite soils migration during and after the activity.
- In order to minimize or help limit spread of invasive plants, sterile soils would be implemented for each project undertaken for construction. Sterile soils have undergone heat or chemical processing to kill any pathogens and seeds that are in it. Sterile soil would be less likely to spread diseases or weeds.
- An Erosion and Sediment Control Plan would be developed before starting the project. Included would be specific practices for controlling erosion and preventing management-caused sediment from reaching the drainage. Compliance would be ensured by frequent inspections.

#### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. None would have an adverse impact on soils and geology. The incremental impact of the action alternative when added to other past, present, and reasonably foreseeable future impacts would be localized by use of project phasing.

#### Conclusion

There would be a number of disruptions to surface soils due to the proposed actions in this alternative. The result would be short-term minor adverse impacts to soils. Most impacts would be localized due to project phasing. Long-term positive impacts to soils would be expected due to soil stabilization, design of walkway alignments to avoid slopes, and minimal ongoing soil erosion maintenance associated with all park project activities.

### **Water Resources/Floodplains**

#### **ALTERNATIVE 1 (NO ACTION)**

##### Impacts

Protection of floodplains would continue with the current management and maintenance strategies in place and the planned repair and restoration of the seawalls. The No Action Alternative would be a continuation of existing conditions, operations, and maintenance of the park. The functional value of the floodplain includes some flood storage, but overall its value is low because it is a relatively small area (25 acres) and contains impervious paving. The No Action Alternative would have no additional impacts on the water surface level during a flood event or on flood frequency, and the existing floodplains function would remain unchanged. Therefore, the No Action Alternative would have no adverse impacts on the 100-year floodplain within the park.

##### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. None would have an impact on water resources and floodplains. The

incremental impact of the no action alternative when added to other past, present, and reasonably foreseeable future actions would be short-term, and negligible.

### Conclusion

Implementation of the No Action alternative would have no adverse impacts on water resources and floodplains and would not contribute to cumulative impacts.

## **ALTERNATIVE 2 (PROPOSED ACTION)**

### Impacts

Implementation of Alternative 2 would require ground disturbance during construction of the circulation system, the Peace Garden, pavilion structures, and housing/administration facilities. Construction would not have a measurable effect on the frequency, elevation, intensity or duration of floods, but the function of the floodplain which includes some flood storage, would be diminished, due to removal of grass cover or other vegetation during construction. Therefore, some vegetation would not be in place during construction to slow floodwater which would result in an increased risk of soil loss during a flood event. The functional value of the floodplain within the park includes some flood storage, but overall its value would be low because it is a relatively small area and contains impervious materials. In order to protect the function of the floodplain during construction, erosion and sediment control would be employed.

Proposed modification of the mostly landscaped area in the 100- year floodplain of the park would not be land contributing to the productivity of a floodplain ecosystem. The historic core and other management zones of the park have been excavated and filled due to construction of circulation and facilities. The historic core has been filled repeatedly since construction of the Memorial in 1915. Therefore, construction activities within alternative 2 would result in short-term minor adverse impacts to surface water and floodplains.

Analysis of National Wetlands Inventory information has indicated that Alternative 2 would not disturb land that contains wetlands.

### Mitigation

- In compliance with the *1987 Standards for Soil Erosion and Sediment Control*, erosion and sediment control measures would be implemented to avoid or minimize the potential for sedimentation and contamination impacts to surface waters due to development of the proposed project.
- To reduce the potential for erosion, and to accelerate the re-establishment of vegetation, disturbed or denuded areas would be re-vegetated upon completion of construction operations.
- To further reduce the potential for sedimentation and contamination impacts to surface waters, proposed impervious surface features such as walking paths would be designed to minimize surface areas to the extent practicable.
- Extensive and detailed geotechnical investigations and calculations would be undertaken prior to initiation of construction.
- Cut and fill amounts would be balanced to minimize the need for import or export of soil.
- Plan and schedule all construction activities to prevent erosion and sedimentation, which would cause possible adverse impacts to water resources and floodplains.
- Construction would be halted during times when soils would be too wet for equipment to operate without increasing the potential for water resource degradation.

### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. None would have an impact on water resources and floodplains. The incremental impact of Alternative 2 when added to

other past, present, and reasonably foreseeable future actions would be short-term and minor due to construction actions within the alternative. Short-term minor adverse impacts within Alternative 2 would contribute slightly to a cumulative minor adverse impact.

#### Conclusion

There would be short-term minor adverse impacts to water resources with the implementation of Alternative 2. Contributing to the minor adverse impacts are the construction of the expanded circulation system and new facilities within the park.

### **ALTERNATIVE 3: (PROPOSED ACTION AND NPS-PREFERRED)**

#### Impacts

Implementation of Alternative 3 would require ground disturbance during construction of the circulation system, the Peace Garden, pavilion structures, and housing/administration facilities. Construction would not have a measurable effect on the frequency, elevation, intensity or duration of floods, but the function of the floodplain which includes some flood storage, would be diminished, due to removal of grass cover or other vegetation during construction. Therefore, some vegetation would not be in place during construction to slow floodwater which would result in an increased risk of soil loss during a flood event. The functional value of the floodplain within the park includes some flood storage, but overall its value would be low because it is a relatively small area and contains impervious materials. In order to protect the function of the floodplain during construction, erosion and sediment control would be employed.

Proposed modification of the mostly landscaped area in the 100- year floodplain of the park would not be land contributing to the productivity of a floodplain ecosystem. The historic core and other management zones of the park have been excavated and filled due to construction of circulation and facilities. The historic core has been filled repeatedly since construction of the Memorial in 1915. Therefore, construction activities within Alternative 3 would result in

short-term minor adverse impacts to surface water and floodplains.

Analysis of National Wetland Inventory (NWI) information has indicated that Alternative 3 would not disturb land that contains wetlands.

#### Mitigation

- In compliance with the *1987 Standards for Soil Erosion and Sediment Control*, erosion and sediment control measures would be implemented to avoid or minimize the potential for sedimentation and contamination impacts to surface waters due to development of the proposed project.
- To reduce the potential for erosion, and to accelerate the re-establishment of vegetation, disturbed or denuded areas would be re-vegetated upon completion of construction operations.
- To further reduce the potential for sedimentation and contamination impacts to surface waters, proposed impervious surface features such as walking paths would be designed to minimize surface areas to the extent practicable.
- Extensive and detailed geotechnical investigations and calculations would be undertaken prior to initiation of construction.
- Cut and fill amounts would be balanced to minimize the need for import or export of soil.
- Plan and schedule all construction activities to prevent erosion and sedimentation, which would cause possible adverse impacts to water resources and floodplains.

#### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. None would have an impact on water resources and floodplains. The incremental impact of Alternative 2 when added to other past, present, and reasonably foreseeable future actions would be short-term and minor due

construction actions within the alternative. Short-term minor adverse impacts within Alternative 3 would contribute slightly to a cumulative minor adverse impact.

### Conclusion

There would be short-term minor adverse impacts to water resources with the implementation of Alternative 3. Contributing to the minor adverse impacts would be the construction of the expanded circulation system and new facilities within the park.

### **Vegetation**

#### **ALTERNATIVE 1 (NO ACTION)**

##### Impacts

The park is landscaped with cultivated lawn grasses and ornamental shrubs and trees and is maintained regularly. Due to poor drainage on the site, standing water has caused the propagation of noxious weeds and undesirable broad-leaved grasses. Current mowing and vegetation management and maintenance regimes within this alternative, including turf management would remain in place. These regimes are not guided by a comprehensive landscape maintenance program for the park. The No Action Alternative would not modify the existing conditions at the park. Therefore, the implementation of Alternative 1 would result in long-term minor adverse impacts to vegetation.

Within the No Action alternative, current vegetation management not associated with a comprehensive management and maintenance program would have a direct and long-term moderate adverse impact on vegetation.

##### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park, some of which would have short-term minor adverse impacts on vegetation. The incremental impact of the no action alternative when added to other past, present, and reasonably foreseeable future actions would result in long-term adverse impacts due to

lack of implemented vegetation management strategies.

### Conclusion

Implementation of the No Action alternative would have long-term minor adverse impact on vegetation due to the lack of vegetation management strategies associated with specific vegetation and turf species and the introduction of invasive species.

#### **ALTERNATIVE 2 (PROPOSED ACTION)**

##### Impacts

Specific actions resulting from the implementation of Alternative 2 and associated potential impacts on vegetation would include: major addition of trees on the east and west of the historic core; introduction of trees within the Peace garden and in the vicinity of the visitor center; introduction of low ground cover or shrubs to protect the berm around the lower plaza from erosion; and, trees placed strategically along the curvilinear pedestrian walkway system. The area of the Peace Garden is currently all turf with two trees. These trees would be removed in this alternative. The Austrian pines would be removed in this alternative due to the plaza reconstruction project that will occur in the near future. Existing trees in the island of the entrance loop drive west of the visitor center would be removed to give greater visibility to the front door of the visitor center. The island would retain the beds of colorful annuals and perennials. The majority of existing trees on the site would be retained and integrated into the proposed new plantings in this alternative. Other proposed actions would include construction of an expanded pedestrian circulation system and new park building facilities. Alternative 2 would have a long-term positive impact on vegetation due to recommendations in the CLTP and introduction of new vegetation that would enhance the visitor experience and the overall historic character of the park.

There would be short-term minor impacts to the turf and a limited amount of trees due to project construction and demolition of some of the existing walkway system. Mitigation measures for



vegetation and turf protection would be implemented to avoid long-term impacts that extend beyond the duration of the project.

#### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. Some would have short-term adverse impacts on vegetation. The incremental impact of Alternative 2 when added to other past, present, and reasonably foreseeable future actions would be long term and positive due to implementation of a vegetation management and maintenance program and strategies for removal and replacement of trees within the park.

#### Conclusion

There would be long-term positive impacts on vegetation within this alternative. Mitigation measures would be required to ensure the short-term adverse impacts would not become long-term adverse impacts. These actions would have a long-term and positive impact on vegetation.

### **ALTERNATIVE 3: (PROPOSED ACTION AND NPS-PREFERRED)**

#### Impacts

Specific actions resulting from the implementation of Alternative 3 and associated potential impacts on vegetation would include: major addition of trees on the east and west of the historic core; introduction of trees within the Peace garden and in the vicinity of the visitor center; introduction of low ground cover or shrubs to protect the berm around the Memorial plazas; introduction of trees flanking the Memorial to replace the Austrian pines; and trees placed strategically along the rectangular pedestrian walkway system. The area of the Peace Garden is currently planted with turf and two trees. These trees would be removed in this alternative. The Austrian pines would be removed in this alternative due to the plaza reconstruction project in the near future. Existing trees in the entrance loop drive west of the visitor center would be removed for greater visibility to the front door of the visitor center. The island would retain a variety of colorful annuals, perennials, and grasses. The majority of existing

trees would remain within the park. Proposed new trees would be integrated into the existing tree patterns. Other proposed actions would include construction of an expanded pedestrian circulation system and new park building facilities. Alternative 3 would have a long-term positive impact on vegetation due to the introduction of new vegetation that would enhance the visitor experience and the overall historic character of the park.

There would be short-term minor impacts to the turf and a limited amount of trees due to project construction and demolition of some of the existing walkway system. Mitigation measures for vegetation and turf protection would be implemented to avoid long-term impacts that extend beyond the duration of the project.

#### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. Some would have short-term adverse impacts on vegetation. The incremental impact of Alternative 3 when added to other past, present, and reasonably foreseeable future actions would be long term and positive due to implementation of a vegetation management and maintenance program and strategies for removal and replacement of trees within the park.

#### Conclusion

There would be long-term positive impacts on vegetation within Alternative 3. Mitigation measures would be required to ensure the short-term adverse impacts would not become long-term adverse impacts. These actions would have a long-term and positive impact on vegetation.

### **Wildlife**

### **ALTERNATIVE 1 (NO ACTION)**

#### Impacts

Continued management and maintenance policies associated with the No Action Alternative would not modify the existing conditions at the park of bird, mammal, reptile and aquatic populations or their habitat. Current habitat vegetation would many species of birds, as do many of the Lake Erie

1 Islands, including Kelley's Island, Middle Bass  
 2 Island, North Bass Island and Gibraltar Island.  
 3 Implementation of Alternative 1 would result in  
 4 negligible adverse impacts to wildlife.

#### 5 Cumulative Impacts

6 There are a number of past, ongoing, and  
 7 reasonably foreseeable projects occurring or  
 8 proposed within the park. Some would have short-  
 9 term minor impacts on wildlife. The incremental  
 10 impact of the no action alternative when added to  
 11 other past, present, and reasonably foreseeable  
 12 future actions would be negligible.

#### 13 Conclusion

14 The No Action Alternative would not modify  
 15 wildlife or critical habitat at Perry's Victory and  
 16 International Peace Memorial. No direct or  
 17 adverse impacts to this resource would be  
 18 expected.

### 19 **ALTERNATIVE 2 (PROPOSED ACTION)**

#### 20 Impacts

21 Specific actions resulting from the implementation  
 22 of this alternative and associated with potential  
 23 impacts on wildlife and wildlife habitat would  
 24 include: introduction of ground cover or low  
 25 shrubs on the berm surrounding the lower plaza;  
 26 and proposed tree plantings east and west of the  
 27 historic core of the park. These two actions would  
 28 afford expanded habitat for a diversity of wildlife  
 29 species including birds, butterflies, moths and  
 30 snakes. Within the development of the Peace  
 31 Garden there would be opportunity to introduce  
 32 specific plant materials that attract butterflies and  
 33 provide habitat. These actions would have a  
 34 positive impact on wildlife extending far into the  
 35 future of the park.

36 Specific actions resulting from the implementation  
 37 of Alternative 2 would have a negligible, short term  
 38 adverse impact on wildlife due to localized impacts  
 39 from additional proposed projects in distinct areas  
 40 of the park, short duration of project construction,  
 41 and prioritized phasing of projects.

#### 42 Cumulative Impacts

43 There are a number of past, ongoing, and  
 44 reasonably foreseeable projects occurring or  
 45 proposed within the park. Some would have  
 46 negligible impacts on wildlife. The incremental  
 47 impact of Alternative 2, when added to other past,  
 48 present, and reasonably foreseeable future actions  
 49 would be long-term and positive.

#### 50 Conclusion

51 There would be no long-term adverse impacts on  
 52 wildlife and wildlife habitat from implementation  
 53 of this alternative. Most impacts would be  
 54 localized and positive and associated with specific  
 55 vegetation proposed for the park.

### 56 **ALTERNATIVE 3: (PROPOSED ACTION AND 57 NPS-PREFERRED)**

#### 58 Impacts

59 Specific actions resulting from the implementation  
 60 of this alternative and associated with potential  
 61 impacts on wildlife and wildlife habitat would  
 62 include: introduction of ground cover or low  
 63 shrubs on the berm surrounding the lower plaza;  
 64 and proposed tree plantings east and west of the  
 65 historic core. These two actions would afford  
 66 expanded habitat for a diversity of wildlife species  
 67 including birds, butterflies, moths and snakes.  
 68 Development of the Peace Garden would present  
 69 an opportunity to introduce plant materials that  
 70 attract butterflies and provide habitat. These  
 71 actions would have a positive impact on wildlife  
 72 extending far into the future of the park.

73 Specific actions resulting from the implementation  
 74 of Alternative 3 would have a negligible, short term  
 75 impact on wildlife due to localized impacts from  
 76 additional proposed projects in distinct areas of  
 77 the park, short duration of project construction,  
 78 and prioritized phasing of projects.

#### 79 Cumulative Impacts

80 There are a number of past, ongoing, and  
 81 reasonably foreseeable projects occurring or  
 82 proposed within the park. Most would have  
 83 negligible impacts on wildlife. The incremental  
 84 impact of Alternative 3, when added to other past,

present, and reasonably foreseeable future actions would be long-term and positive.

### Conclusion

There would be no long-term adverse impacts on wildlife and wildlife habitat from implementation of this alternative. Most impacts would be localized and positive and associated with specific vegetation proposed for the park.

## **Threatened and Endangered Species**

### **ALTERNATIVE 1 (NO ACTION)**

#### Impacts

During informal consultation with U.S. Fish and Wildlife Service (USFWS) the following comments were given to the park pursuant to the Fish and Wildlife Coordination Act (16 U.S.C.661 et seq.), National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347), and the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1544). The Lake Erie islands provide important migration and stopover habitat for monarchs as they fly between the U.S., Mexico and Canada – a journey of over 3,000 miles. This journey has become more perilous for many monarchs because of threats along their migratory paths and on their breeding and wintering grounds. Monarch population have declined significantly in recent years. Threats include habitat loss – particularly the loss of milkweed, the monarch caterpillar’s sole food source – and mortality resulting from pesticide use. The park is within the range of the monarch butterfly. USFWS has determined that listing under ESA may be warranted.

The state of Ohio lies within range of the Federally endangered Indiana bat (*Myotis sodalist*) and the federally threatened northern long-eared bat (*Myotis septentrionalis*). The park also lies in the range of the Lake Erie watersnake (*Nerodia sipedon insularum*) and the kirtland warbler (*Septophaga kirtlandii*). There would be no disturbance within Alternative 1 to these species or their supporting habitat. Rare and endangered plant species occur within wetlands and mudflats in the shoreline areas of the Lake Erie islands. No threatened or rare plant species are found within the boundary of the park. Therefore, in Alternative

1 there are no adverse impacts to rare, endangered and threatened species within the park.

### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. The restoration of the seawalls would occur in the next five years. This project would have the potential to disturb shoreline edges and thus habitat for the watersnake. Therefore, there would be short term (duration of the project for a year or 18 months) minor adverse impact on the species. The viability of the population would not be affected. The incremental impact of the no action alternative when added to this future action would be a negligible.

### Conclusion

Within the No Action Alternative, there would be no disturbance to vegetation habitats for identified species of concern and therefore no adverse impact to this resource. During the implementation of the seawall restoration, habitat for the watersnake could be disturbed, but Alternative 1 does not add an adverse incremental impact to the negligible effect of the seawall project.

### **ALTERNATIVE 2 (PROPOSED ACTION)**

#### Impacts

Specific actions resulting from construction of circulation and facilities in Alternative 2 would have a short-term (time of the construction implementation) minor adverse impact on rare, threatened and endangered species. The viability of biotic populations of concern would not be impacted and the community if left alone would recover. Also, Alternative 2 would result in long-term (life of the proposed vegetation) positive impact on rare, threatened and endangered species due to tree plantings over the entire park and a variety of other plant species within the Peace garden. Plantings would include milkweed to support and attract the Monarch butterflies by addition of critical habitat.

## Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. None would have an impact on rare, threatened, or endangered species. The incremental impact of Alternative 2 when added to other past, present, and reasonably foreseeable future actions would be long term and positive due to vegetation management and addition of critical wildlife habitat.

## Conclusion

The proposed vegetation management and maintenance and supporting vegetation habitat would have a long-term and positive impact on rare, threatened and endangered species.

## **ALTERNATIVE 3: (PROPOSED ACTION AND NPS-PREFERRED)**

### Impacts

Specific actions resulting from construction of circulation and facilities in Alternative 3 would have a short-term (time of the construction implementation) minor adverse impact on rare, threatened and endangered species. The viability of biotic populations of concern would not be impacted and the community if left alone would recover. Also, Alternative 3 would result in long-term (life of the proposed vegetation) positive impact on rare, threatened and endangered species due to tree plantings over the entire park and a variety of other plant species within the Peace Garden. Plantings would include milkweed to support and attract the Monarch butterflies by addition of critical habitat.

## Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. None would have an impact on rare, threatened, or endangered species. The incremental impact of Alternative 3 when added to other past, present, and reasonably foreseeable future actions would be long term and positive due to vegetation management and addition of critical wildlife habitat.

## Conclusion

The proposed vegetation management and maintenance and supporting vegetation habitat would have a long-term and positive impact on rare, threatened and endangered species.

## **Cultural Resources**

### **Historic Buildings and Structures**

#### **ALTERNATIVE 1 (NO ACTION)**

### Impacts

Current management regimes within Alternative 1 would continue and include repair and maintenance to historic buildings and structures at Perry's Victory and International Peace Memorial. This would include maintenance and management of the Memorial column, plazas, steps, walls and associated granite benches and urns. There would be continued cyclical repair work on the lower plaza in order to repoint selected paving joints. Similar management and maintenance would continue for the Men's Dormitory building and the Rangers Operations Center. The Rangers Operation Center is a non-contributing feature to the historic integrity of the site. It would not require management as a historic building. A project is currently underway to repair/repoint the column and an upcoming project would rehabilitate the upper plaza of the Memorial. Within this alternative, there would continue to be no ABAAS access to the Memorial plazas or the column. The park would continue to adhere to the policy of not providing ABAAS accessibility standards for the column and observation platform. Within this alternative, there would be limited programmatic accessibility at the visitor center or elsewhere within the park to give disabled visitors a commensurate experience of the views that are essential to interpretation from the observation platform of the column. Alternative 1 would have no adverse impact on the physical structure of historic buildings and structures within the park. (See visitor use and experience for further analysis associated with current ABAAS accessibility for historic features of the park.)

## Section 106 Summary

NHPA section 106 regulations apply only to properties that meet the eligibility requirements of the National Register. Therefore, assessment of NHPA section 106 effects applies only to those historic structures/cultural landscape features that are listed on the National Register or those that meet National Register criteria for listing. The application of the Advisory Council criteria of adverse effects (36 CFR 800.5 “Assessment of Adverse Effects”) has been completed.

For purposes of Section 106 compliance there would be **no adverse effect** on Historic Buildings and Structures.

## Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. Some would have a positive impact to historic buildings and structures. The incremental impact of Alternative 1 when added to other past, present, and reasonably foreseeable future actions would be long-term and positive.

## Conclusion

Current management and maintenance of historic buildings and structures, park goals of preservation of the historic character of the Memorial and grounds and lack of ABAAS accessibility standards for the plazas and column would result in no modifications to existing historic buildings and structures. Therefore, implementation of the No Action Alternative would result in no adverse impacts to these resources.

## **ALTERNATIVE 2 (PROPOSED ACTION)**

### Impacts

In the development of the action alternatives, a priority was defined and articulated by park staff. This priority was the desire to make park entrances, circulation and major features compliant with ABAAS standards for accessibility, so all visitors would be able to access the park, and its facilities. The park staff also had strong feelings about accommodating visitors at the Memorial

through implementation of ABAAS standards for access to the lower plaza and access from the lower plaza to the upper plaza. The staff were not in favor of options that brought visitors around the side or rear of the upper plaza, but rather felt that any accessibility changes would allow visitors to experience the grandeur of the Beaux Arts design. In response, the design team located a ramp system on either side of the grass berm that would provide access to the lower plaza and a ramp system in the center of the monumental steps leading from the lower to the upper plaza. This approach would preserve the greatest amount of the existing stair system as well as the symmetry of the original design. At each end of the stairs, the existing relationship between the plinths and the urns would be maintained. The slope of the ramps is shallow enough that railings would not be required. While not required, the design team provided a granite perimeter seat that would create a safety barrier. Heights of landings and adjacent steps or ramps would not require guardrails.

Alternative 2 would be sensitive to the original design intent for the paving materials on both plazas. Recommendations would enhance the sustainability of the plaza paving and materials would be of the highest quality and condition and the historic paving pattern would be retained. The visitors eye would move quickly away from the familiar historic surface pattern to the contrasting simplicity of the Doric column above, and then onto the views and vistas of the historic core from the plaza.

Within this alternative and due to the goals for accessibility, there would be a moderate adverse effect to the Memorial steps, one of the character defining features of the Memorial structure. Alteration of the steps for accessibility would diminish the overall integrity of this feature, but would not jeopardize the historical integrity of the Memorial structure and grounds to the extent that it would lose its current listing in the National Register. The determination of effect for Section 106 would be **adverse effect**.



## Section 106 Summary

NHPA section 106 regulations apply only to properties that meet the eligibility requirements of the National Register. Therefore, the assessment of NHPA section 106 effects applies only to those historic structures/cultural landscape features that are listed on the National Register or those that meet National Register criteria for listing. The application of the Advisory Council criteria of adverse effects (36 CFR 800.5 “Assessment of Adverse Effects”) has been completed.

For purposes of Section 106 compliance there would be **adverse effect** on Historic Buildings and Structures due to proposed actions in Alternative 2.

## Mitigation

- Pursuant to a Programmatic Agreement, the NPS would continue to consult with the Ohio SHPO Office and concurring parties to ensure that the undertaking will meet the Secretary of Interior’s Standards for Rehabilitating Historic Structures and Cultural Landscapes.

## Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. Some would have a positive impact to historic buildings and structures. The incremental impact of Alternative 2 when added to other past, present, and reasonably foreseeable future actions would be long-term, minor and adverse.

## Conclusion

Within Alternative 2, all maintenance and management of historic building and structures would continue including projects for repair and restoration of the column and the plazas. These projects plus the paving recommendation (upper plaza will be paved with granite and brick, based on the original design and pattern of the Freedlander plans) within this alternative would have a long-term positive impact on the Memorial structure. Ramp access to the lower plaza would have a minor impact on the resource and for Purposes of Section 106, no adverse effect.

Implementation of ABAAS standards for accessibility from the lower plaza to the upper plaza would be a moderate adverse impact on the structure and for purposes of Section 106, an **adverse effect**.

## **ALTERNATIVE 3: (PROPOSED ACTION AND NPS-PREFERRED)**

### Impacts

In the development of the action alternatives, a priority was defined and articulated by park staff. This priority was the desire to make park entrances, circulation and major features compliant with ABAAS standards for accessibility so visitors would be able to access the park, and its facilities. The park staff also had strong feelings about accommodating visitors at the Memorial through implementation of ABAAS standards for accessibility to the lower plaza and from the lower plaza to the upper plaza. The staff were not in favor of options that brought visitors around the side or rear of the upper plaza, but rather felt that any accessibility changes would allow visitors to experience the grandeur of the Beaux Arts design. In response, the design team located a ramp system on either side of the grass berm that would provide access to the lower plaza and a ramp system in the center of the monumental steps leading from the lower to the upper plaza. This approach would preserve the greatest amount of the existing stair system as well as the symmetry of the original design. At each end of the stairs, the existing relationship between the plinths and the urns would be maintained. The slope of the ramps is shallow enough that railings would not be required. While not required, the design team provided a granite perimeter seat that would create a safety barrier. Heights of landings and adjacent steps or ramps would not require guardrails.

Alternative 3 would be sensitive to the original design intent for the paving materials on both plazas. Recommendations would enhance the sustainability of the plaza paving and materials would be of the highest quality and condition and the historic paving pattern would be retained. The visitors eye would move quickly away from the familiar historic surface pattern to the contrasting

simplicity of the Doric column above, and then onto the views and vistas of the historic core from the plaza.

Within this alternative and due to the goals for accessibility, there would be a moderate adverse effect to the Memorial steps, one of the character defining features of the Memorial structure. Alteration of the steps for accessibility would diminish the overall integrity of this feature but would not jeopardize the historical integrity of the Memorial structure and grounds to the extent that it would lose its current listing in the National Register. The determination of effect for Section 106 would be **adverse effect**.

#### Section 106 Summary

NHPA section 106 regulations apply only to properties that meet the eligibility requirements of the National Register. Therefore, the assessment of NHPA section 106 effects applies only to those historic structures/cultural landscape features that are listed on the National Register or those that meet National Register criteria for listing. The application of the Advisory Council criteria of adverse effects (36 CFR 800.5 “Assessment of Adverse Effects”) has been completed.

For purposes of Section 106 compliance there would be **adverse effect** on Historic Buildings and Structures due to proposed actions in Alternative 3.

#### Mitigation

- Pursuant to a Programmatic Agreement, the NPS would continue to consult with the Ohio SHPO Office and concurring parties to ensure that the undertaking will meet the Secretary of Interior’s Standards for Rehabilitating Historic Structures and Cultural Landscapes.

#### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. Some would have a positive impact to historic buildings and structures. The incremental impact of Alternative 3 when added to other past, present, and

reasonably foreseeable future actions would be long-term, minor, and adverse.

#### Conclusion

Within Alternative 3, all maintenance and management of historic building and structures would continue as well as projects for repair and restoration of the column and the plazas. These projects plus the paving recommendation (upper plaza will be paved with granite and brick, based on the original design and pattern of the Freedlander plans) within this alternative would have a long-term positive impact on the Memorial structure. Ramp access to the lower plaza would have a minor impact on the resource and for purposes of Section 106, no adverse effect. Changes to the steps, a character defining feature of the Memorial, to implement ABAAS standards for accessibility from the lower plaza to the upper plaza, would be a moderate adverse impact on the structure and for purposes of Section 106, an **adverse effect**.

#### **Cultural Landscape**

#### **ALTERNATIVE 1 (NO ACTION)**

#### Impacts

Current management and maintenance within this alternative focus on preservation of the designed historic landscape of Perry’s Victory and International Peace Memorial. The landscape around the Memorial was carefully considered to provide an appropriate setting for the monument itself. As noted in the National Register Nomination Additional Documentation for the Memorial, Freedlander and Seymour considered views both to and from the monument, utilizing Beaux Arts planning features such as axial avenues and planned vistas. As noted in the National Register Additional Documentation:

The openness of the site, achieved through the establishment of lawn areas on the east and west sides of the plazas that reflect the open expanses of water on the north and south sides, provides the symmetrical balance that is one of the hallmarks of Beaux Arts Classicism...

The most prominent vegetative feature of the site, however, is the flat, grassed lawn, a

mixture of grasses, clove, and weeds... The architects specified a mixture of several types of grasses and white clover in the earliest landscape design, but it is unknown whether that was ultimately the mix planted or if any of the original grasses remain. Nevertheless, the wide, flat, horizontal expanse of grass as a visual counter to the verticality of the Memorial column was integral to the original design concept... In addition, the planter beds located on the upper plaza were specified as beds of grass, called grass panels in the original design. As grass panels, they would carry the overall effect of the horizontal plane of the lawn onto the plaza. Although planted in barberry hedging between 1925 and 1933, they have been planted in grass, per the original design, since the removal of the barberry hedges beginning in the mid-1930s.<sup>24</sup>

In 1924, Freedlander redesigned some of the landscape plantings in response to a shortfall in funding for the designed landscape. The revised design includes plantings of trees and shrubs along the east and west boundaries of the original site, framing the plazas and lawns.<sup>25</sup>

Exploration of ways to utilize the cultural landscape as a tool for interpreting the historical context of the battle and the updated understanding of some battle events and troop movements would not be part of continuing management within this alternative. Visitors would continue to gain most of their knowledge of the Battle of Lake Erie through the exhibits located within the visitor center and on the observation platform of the Memorial column, which is not ABAAS accessible. This alternative would limit the park in its ability to explain the historical context of the battle through visual association and interpretation of the cultural landscape. The park would manage and maintain the open turf landscape, the grass panels on the upper plaza, and existing tree plantings on the east and west boundaries of the historic core. There

would be no direct adverse impact to the cultural landscape within this alternative, but there would be limitations to its use in expanded interpretation.

#### Section 106 Summary

NHPA section 106 regulations apply only to properties that meet the eligibility requirements of the National Register. Therefore, the assessment of NHPA section 106 effects applies only to those historic structures/cultural landscape features that are listed on the National Register or those that meet National Register criteria for listing. The application of the Advisory Council criteria of adverse effects (36 CFR 800.5 “Assessment of Adverse Effects”) has been completed.

For purposes of Section 106 compliance there would be **no adverse effect** on the cultural landscape.

#### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. Some would have a positive impact to the cultural landscape. The incremental impact of the no action alternative when added to other past, present, and reasonably foreseeable future actions would be negligible.

#### Conclusion

Current management and maintenance of the cultural landscape and park goals of preservation of historical character of the historic designed landscape would result in no modifications to the existing cultural landscape. Therefore, implementation of the No Action alternative would not result in any changes to the overall integrity or on the character-defining features of the cultural landscape as they currently exist. Therefore, there would be no adverse

<sup>24</sup> Ibid, 7-10, 7-11.

<sup>25</sup> Deborah E. Harvey, MHP, Outside the Box, LLC, Richmond, Virginia, *National Register Nomination for Perry's Victory and International Peace Memorial (Additional Documentation)*, September 8, 2014, 7-11, 7-12.

1 impacts and no adverse effects to the cultural  
2 landscape.

### 3 **ALTERNATIVE 2 (PROPOSED ACTION)**

#### 4 Impacts

5 Alternative 2 would retain and enhance the  
6 landscape elements and features that are  
7 contributing resources to the landscape. Also, the  
8 historically important views of the cultural  
9 landscape would be maintained and enhanced. In  
10 addition, the flagpoles would be retained and the  
11 grading of the topography would continue the  
12 symmetry around the Memorial while retaining  
13 the open space setting of the historic designed  
14 landscape. Alternative 2 would add expanded  
15 walkways within the historic core of the park. The  
16 curvilinear alignments are graceful and sensitive to  
17 the simplicity of the Memorial grounds. Although  
18 a proposed change to the landscape, the change  
19 would preserve the openness and restore some of  
20 the original design intent to the grounds.  
21 Alternative 2 would situate the Memorial firmly in  
22 its landscape, drawing together the Doric column,  
23 the berm and the open lawn areas into to total  
24 composition. Overall, Alternative 2 would respect  
25 and enhance the landscape and setting of the  
26 Memorial and grounds and afford visitors  
27 opportunities for expanded interpretation through  
28 integration with the cultural landscape. There  
29 would be a long-term positive impact on the  
30 cultural landscape.

#### 31 Section 106 Summary

32 NHPA section 106 regulations apply only to  
33 properties that meet the eligibility requirements of  
34 the National Register. Therefore, the assessment  
35 of NHPA section 106 effects applies only to those  
36 historic structures/cultural landscape features that  
37 are listed on the National Register or those that  
38 meet National Register criteria for listing. The  
39 application of the Advisory Council criteria of  
40 adverse effects (36 CFR 800.5 “Assessment of  
41 Adverse Effects”) has been completed.

42 For purposes of Section 106 compliance there  
43 would be no adverse effect on cultural  
44 landscapes.

#### 45 Cumulative Impacts

46 There are a number of past, ongoing, and  
47 reasonably foreseeable projects occurring or  
48 proposed within the park. Some would have a  
49 positive impact to the cultural landscape. The  
50 incremental impact of Alternative 2 when added to  
51 other past, present, and reasonably foreseeable  
52 future actions would be long-term and positive.

#### 53 Conclusion

54 With implementation of the proposed actions in  
55 Alternative 2 and maintenance of the integrity of  
56 the cultural landscape while integrating it with the  
57 overall visitor experience, there would be a long-  
58 term and positive impact on the cultural landscape  
59 of Perry’s Victory and International Peace  
60 Memorial.

### 61 **ALTERNATIVE 3: (PROPOSED ACTION AND** 62 **NPS-PREFERRED)**

#### 63 Impacts

64 Alternative 3 would retain and enhance the  
65 landscape elements and features that are  
66 contributing resources to the landscape. Also, the  
67 historically important views of the cultural  
68 landscape would be maintained and enhanced. In  
69 addition, the flagpoles would be retained and the  
70 grading of the topography would retain the  
71 symmetry around the Memorial while retaining  
72 the open space setting of the historic designed  
73 landscape. Alternative 3 would retain many of the  
74 existing walkways and also add walkways within  
75 the historic core of the park. The additional  
76 walkways that parallel the Memorial would  
77 provide additional access to the south boundary of  
78 the park and views and access to the south façade  
79 of the Memorial. The walkway alignments would  
80 be rectilinear and retain more of the existing  
81 walkways within the historic core. The circulation  
82 design would retain the open symmetrical lawn  
83 areas to the east and west of the Memorial. This  
84 alternative would incorporate additional tree  
85 plantings located east and west of the historic core  
86 that help re-establish enclosure of the historic core  
87 space. Alternative 3 would change the landscape,  
88 but the actions would preserve the openness and  
89 restore some of the original design intent to the  
90 grounds. Alternative 3 would situate the Memorial

firmly in its landscape, drawing together the Doric column, the berm and the open lawn areas into a total composition. Overall, Alternative 3 would respect and enhance the landscape and setting of the Memorial and grounds and afford visitors opportunities for expanded interpretation through integration with the cultural landscape.

#### Section 106 Summary

NHPA section 106 regulations apply only to properties that meet the eligibility requirements of the National Register. Therefore, the assessment of NHPA section 106 effects applies only to those historic structures/cultural landscape features that are listed on the National Register or those that meet National Register criteria for listing. The application of the Advisory Council criteria of adverse effects (36 CFR 800.5 “Assessment of Adverse Effects”) has been completed.

For purposes of Section 106 compliance there would be **no adverse effect** on cultural landscapes.

#### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. Some would have a positive impact to the cultural landscape. The incremental impact of Alternative 3 when added to other past, present, and reasonably foreseeable future actions would be long-term and positive.

#### Conclusion

With implementation of the proposed actions in Alternative 3 and maintenance of the integrity of the cultural landscape, there would be a long-term and positive impact on the cultural landscape of Perry’s Victory and International Peace Memorial.

### **Historic Viewsheds**

#### **ALTERNATIVE 1 (NO ACTION)**

##### Impacts

The historic viewsheds associated with the Memorial and grounds would be maintained in their current conditions within this alternative. Powerlines would remain in the viewshed along Bayview Avenue from Hartford to Toledo

Avenues and create visual clutter in the major viewshed to the Memorial and the park identification sign. A variety of traffic signs and signals would continue to contribute to the clutter in this viewshed to the Memorial. The viewshed from the park entrance at Delaware and Toledo Avenues would need consistent vegetation management and maintenance in order to retain the viewshed to the Memorial. The viewshed from the historic designed landscape to the Memorial column would be maintained and managed. Historic viewsheds from the water toward the Memorial would remain relatively uncluttered but the park does not have jurisdiction over dock construction in Put-in-Bay and that development would continue to disrupt the viewshed from Lake Erie to the Memorial. The viewshed from the observation platform of the Memorial column to the site of the Battle of Lake Erie, would survive with no visual interference. Implementation of this alternative would result in long-term minor adverse impacts to historic viewsheds.

#### Section 106 Summary

NHPA section 106 regulations apply only to properties that meet the eligibility requirements of the National Register. Therefore, the assessment of NHPA section 106 effects applies only to those historic structures/cultural landscape features that are listed on the National Register or those that meet National Register criteria for listing. The application of the Advisory Council criteria of adverse effects (36 CFR 800.5 “Assessment of Adverse Effects”) has been completed.

For purposes of Section 106 compliance there would be **no adverse effect** on Historic Viewsheds.

#### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. None would have an impact on historic viewsheds. The incremental impact of the no action alternative when added to other past, present, and reasonably foreseeable future actions would be negligible.



## Conclusion

Historic viewsheds associated with the Memorial column and grounds are managed and maintained within this alternative. Current management and maintenance of the viewsheds and park goals for preservation of the historic character of the park would result in no modification to the existing historic viewsheds. Therefore, implementation of the No Action alternative would result in no adverse impact on historic viewsheds.

## **ALTERNATIVE 2 (PROPOSED ACTION)**

### Impacts

In the original design for the Memorial, Freedlander and Seymour considered views both to and from the monument, utilizing Beaux Arts planning features such as axial avenues and planned vistas. Specific actions resulting from the implementation of this alternative and associated with potential impacts on these historic viewsheds would include: underground powerlines along Bayview Avenue from Hartford to Toledo Avenues, additional tree plantings strategically located to enhance views to the Memorial; and maintenance of open space around the Memorial and plazas. These actions would have a long-term positive impact on historic viewsheds within the park and from the park.

Construction activities associated with expansion of circulation and addition of small buildings would have a short-term minor adverse impact on historic viewsheds when large equipment and associated construction fences or storage obstructs the viewsheds. These impacts would be short-term (the duration of the project) and the viewshed re-established once construction was complete.

Overall there would be a long-term positive impact on historic viewsheds with the implementation of Alternative 2.

### Section 106 Summary

NHPA section 106 regulations apply only to properties that meet the eligibility requirements of the National Register. Therefore, the assessment of NHPA section 106 effects applies only to those

cultural landscape features including historic viewsheds that are listed on the National Register or those that meet National Register criteria for listing. The application of the Advisory Council criteria of adverse effects (36 CFR 800.5 “Assessment of Adverse Effects”) has been completed. For purposes of Section 106 compliance there would be **no adverse effect** on Historic Viewsheds.

### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. None of which would have an impact on historic viewsheds. The incremental impact of the Alternative 2 when added to other past, present, and reasonably foreseeable future actions would be long-term and positive due to the re-establishment of critical viewsheds and subsequent management and maintenance.

### Conclusion

Under Alternative 2, viewsheds associated with the Memorial and landscape conditions would be re-established, maintained and managed and offer park visitors an understanding of the historic landscape, the Memorial column and plazas, and the Battle of Lake Erie from the observation platform at the top of the Memorial column. Overall, the impact of Alternative 2 on historic viewsheds would be long-term and positive.

## **ALTERNATIVE 3: (PROPOSED ACTION AND NPS-PREFERRED)**

### Impacts

In the original design for the Memorial, Freedlander and Seymour considered views to and from the monument, utilizing Beaux Arts planning features such as axial avenues and planned vistas. Specific actions resulting from the implementation of this alternative and associated with potential impacts on historic viewsheds would include: underground powerlines along Bayview Avenue from Hartford to Toledo Avenues; additional tree plantings strategically located to enhance views to the Memorial; and maintenance of open space around the Memorial and plazas. These actions

would have a long-term positive impact on historic viewsheds within the park and from the park.

Construction activities associated with expansion of circulation and addition of small buildings could have a short-term minor adverse impact on historic viewsheds when large equipment and associated construction fences or storage obstructs the viewsheds, especially internal park views to and from the Memorial. These impacts would be short-term (the duration of the project) and the viewshed re-established once construction is complete.

Overall there would be a long-term positive impact on historic viewsheds with the implementation of Alternative 3.

### Section 106 Summary

NHPA section 106 regulations apply only to properties that meet the eligibility requirements of the National Register. Therefore, the assessment of NHPA section 106 effects applies only to those cultural landscape features including historic viewsheds that are listed on the National Register or those that meet National Register criteria for listing. The application of the Advisory Council criteria of adverse effects (36 CFR 800.5 “Assessment of Adverse Effects”) has been completed. For purposes of Section 106 compliance there would be **no adverse effect** on Historic Viewsheds.

### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park. None would have an impact on historic viewsheds. The incremental impact of the Alternative 3 when added to other past, present, and reasonably foreseeable future actions would be long-term and positive due to the re-establishment of critical viewsheds and subsequent management and maintenance.

### Conclusion

Under Alternative 3, viewsheds associated with the Memorial and landscape conditions would be re-established, maintained and managed and offer park visitors an understanding of the historic

landscape, the Memorial column and plazas, and the Battle of Lake Erie from the observation platform at the top of the Memorial column. Overall, the impact of Alternative 2 on historic viewsheds would be long-term and positive.

## **Visitor Use and Experience**

### **ALTERNATIVE 1 (NO ACTION)**

#### Impacts

Within Alternative 1, there would be no additions to visitor facilities and the initial visitor experience would begin at the visitor center. There would be no distinct entrance or transition from the Village and surrounding community to the park. Programs and interpretation guided by the Long Range Interpretive Plan would continue. Visitors would continue to access the park at the intersection of Delaware and Toledo Avenues and at the intersection of Bayview and Toledo Avenues. The park would continue to manage and maintain the pedestrian circulation system in its current alignment throughout the park. Within this alternative would be no new visitor amenities and no expansion of interpretation using the cultural landscape as a tool for interpreting the significance of the site. The No Action Alternative would continue to have moderate adverse impacts on the visitor experience due to major limitations of ABA-ADA access to the visitor center east porch and entrance as well as no accessibility to the Memorial plazas for visitors with disabilities. There would continue to be no clear access and orientation afforded to visitors as they approach the park from the Village and surrounding roadways. Therefore, Alternative 1 would have long-term moderate adverse impact on the visitor experience. Visitor frustration has been expressed to park staff concerning the visitor experience and lack of accessibility.

#### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park, which would have short-term positive impacts to the visitor experience. These projects would be for the most part associated with maintenance and management. The incremental impact of the no

action alternative when added to other past, present, and reasonably foreseeable future actions would be long-term and adverse as the overall visitor experience would remain the same, with limited interpretation and full accessibility for all park visitors.

#### Conclusion

This alternative would have long-term moderate adverse impacts on the visitor experience due to the limitations of existing interpretation and integrated with the cultural landscape. Even more significant is the lack of universal accessibility including programmatic accessibility to park visitors with disabilities.

### **ALTERNATIVE 2 (PROPOSED ACTION)**

#### Impacts

Specific actions resulting from the implementation of this alternative and associated with potential impacts on visitor use and experience would include: expanded pedestrian circulation system with curvilinear walkways; creation of spaces in the landscape for passive recreation and contemplation; expanded circulation system that would meet ABAAS standards for accessibility throughout the park landscape, the Memorial plazas, the visitor center and all proposed park buildings; addition of distinct and formal entrances to the park, including the new route through the Peace Garden from Hartford Avenue and the other entrances from Toledo Avenue; addition of contemplative nodes along the walkway to afford visitors shade, seating, wayside interpretation and viewsheds; and, addition of open-air pavilion structures east of the visitor center for group gatherings, special events associated with interpretation, shade, and protection from the elements. The visitor center would also offer programmatic accessibility for disabled visitors. The proposed actions in Alternative 2 would have a long-term positive impact to visitor use and experience at Perry's Victory and International Peace Memorial.

#### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or

proposed within the park, which would have short-term positive impacts, associated with maintenance and management, to the visitor experience at Perry's Victory and International Peace Memorial. The incremental impact of Alternative 2 when added to other past, present, and reasonably foreseeable future actions would be long-term and positive for visitor use and experience at the park.

#### Conclusion

The proposed walkways would be expanded and modified in accordance with the site grading and landscape. The system of curvilinear walkways and associated nodes would guide pedestrian movement across the visitor access /administration zone and the historic core zone of the park. In addition, walkways would improve accessibility throughout the park thereby creating a positive impact for access by visitor with disabilities. The proposed actions in Alternative 2 would have a long-term positive impact to visitor use and experience at Perry's Victory and International Peace Memorial.

### **ALTERNATIVE 3: (PROPOSED ACTION AND NPS-PREFERRED)**

#### Impacts

Specific actions resulting from the implementation of this alternative and associated with potential impacts on visitor use and experience would include: expanded pedestrian circulation system with walkways and major nodes; expanded circulation system that would meet ABAAS accessibility standards throughout the park landscape, the Memorial plazas, the visitor center and all proposed park buildings; addition of distinct and formal entrances to the park that would include the new route through the Peace Garden from Hartford Avenue and the other entrances from Toledo Avenue; addition of three contemplative nodes, two at the south terminus of the diagonal walkways and one associated with the northwest corner of the park afford visitors shade, seating, wayside interpretation and viewsheds to the landscape; and, addition of open-air pavilion structures flanking the east façade of the visitor center for expanded park programs and special

events. The visitor center would also offer programmatic accessibility for disabled visitors. The proposed actions in Alternative 3 would have a long-term positive impact to visitor use and experience at Perry's Victory and International Peace Memorial.

#### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park, which would have short-term positive impacts, associated with maintenance and management, to the visitor experience at Perry's Victory and International Peace Memorial. The incremental impact of Alternative 3 when added to other past, present, and reasonably foreseeable future actions would be long-term and positive for visitor use and experience at the park.

#### Conclusion

The proposed walkways would be expanded and modified in accordance with the site grading and landscape. The system of walkways and associated nodes would guide pedestrian movement across the visitor access /administration zone and the historic core zone of the park. In addition, walkways would improve accessibility throughout the park thereby creating a positive impact for access by visitor with disabilities. The proposed actions in Alternative 3 would have a long-term positive impact to visitor use and experience at Perry's Victory and International Peace Memorial.

### **Human Health and Safety**

#### **ALTERNATIVE 1 (NO ACTION)**

##### Impacts

The No Action Alternative would represent a continuation of the existing conditions, operations, and maintenance of Perry's Victory and International Peace Memorial. Park staff would continue to implement plans and policies to promote safety for all visitors to the park. Park personnel would remain vigilant with visitor safety issues dealing with severe summer weather, heat and humidity, insects, storms, and flooding. Current and ongoing management and

maintenance of buildings, structures, walkways, exhibits, site furnishings, and vegetation would continue. There would also be continued monitoring and maintenance of the park's signage that clarifies separation of vehicular and pedestrian circulation, and limited access to the Memorial upper plaza. Park staff would supervise visitation at the Memorial column and plazas in order to keep visitors from climbing the berm around the lower plaza. Park staff would also monitor golf cart use of pedestrian walkways. Pathway lighting would remain in the vicinity of the visitor center.

The black powder magazine would remain in a location that does not meet compliance standards for this type of facility. This would result in a potential safety hazard in the proximity of staff housing and the adjacent neighborhood east of the park.

There would be a long-term (a year or longer to implement a PMIS project or projects) localized adverse impact to this specific area within the park. The impact would be significant due to potential threats to the safety and well-being of park staff, visitors and neighbors. Therefore, there would be a long-term moderate adverse impact on human health and safety.

##### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park, which would have short-term positive impacts associated with maintenance and management for human health and safety at Perry's Victory and International Peace Memorial. The incremental impact of the no action alternative when added to other past, present, and reasonably foreseeable future actions would add a long-term and adverse impact due to the continued issue of visitor safety associated with the location of the black powder magazine.

##### Conclusion

Within this alternative, there would be significant (immediate and unaddressed threats to human safety) adverse impacts on human health and safety.

## **ALTERNATIVE 2 (PROPOSED ACTION)**

### Impacts

Specific actions from the implementation of alternative 2 associated with potential impacts on human health and safety would include: relocation of the black powder magazine south of staff housing and within the required 75' buffer; ABAAS accessibility to all park circulation and facilities; new and sustainable paving on the upper plaza; removal of parking from the north side of the Memorial and clear directional signage and circulation from village streets into and through the park. There would be consideration and planning for necessary lighting along pathways and use of solar energy in the implementation of any new lighting plans. These actions would have a long-term positive impact on human health and safety within the park.

### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park which would have short-term positive impacts on human health and safety. The incremental impact of Alternative 2 when added to other past, present, and reasonably foreseeable future actions would be long-term and positive due to the implementation of the specified improvements in Alternative 2.

### Conclusion

Within this alternative, there would be long-term and positive impacts on human health and safety. The number and extent of the specified actions would ensure for many years into the future, the well-being of park staff, visitors and neighbors.

## **ALTERNATIVE 3: (PROPOSED ACTION AND NPS-PREFERRED)**

### Impacts

Specific actions from the implementation of Alternative 3 associated with potential impacts on human health and safety would include: relocation of the black powder magazine south of staff housing and within the required 75' buffer; ABAAS accessibility to all park circulation and facilities; new and sustainable paving on the upper plaza;

removal of parking from the north side of the Memorial; and clear directional signage and circulation from village streets into and through the park. There would be consideration and planning for necessary lighting along pathways and use of solar energy in the implementation of new lighting plans. These actions would have a long-term positive impact on human health and safety within the park.

### Cumulative Impacts

There are a number of past, ongoing, and reasonably foreseeable projects occurring or proposed within the park which would have short-term positive impacts on human health and safety. The incremental impact of Alternative 3 when added to other past, present, and reasonably foreseeable future actions would be long-term and positive due to the implementation of the specified improvements.

### Conclusion

Within Alternative 3, there would be long-term and positive impacts on human health and safety. The number and extent of the specified actions would ensure for many years into the future, the well-being of park staff, visitors and neighbors.

## **Consultation and Coordination**

National Park Service (NPS) Director's Order 12 requires the NPS to make "diligent" efforts to involve the interested and affected public in the National Environmental Policy Act (NEPA) process. This chapter documents the scoping process for this Environmental Assessment (EA) as well as interagency consultation and coordination with the U. S. Fish and Wildlife Service (USFWS), Ohio State Historic Preservation Office (SHPO) and other natural and cultural resource agencies. Included in this chapter is the list of recipients who received notice of the project undertaking and the planned stakeholder meetings.

## **Scoping Process and Public Involvement**

**Start-Up Meeting:** To officially initiate this project, a kick-off meeting was held on November



14 and 15, 2016. Project team members from Commonwealth Heritage Group (CHG) and Weiss, Janney, Elstner (WJE) met with park and regional NPS personnel at Perry's Victory and International Peace Memorial to initiate work on the Comparative Analysis and development of the Cultural Landscape Treatment Plan Alternatives and the Environmental Assessment (EA). This internal scoping meeting included the following participants:

- Bill Harlow, *Chief, Historic Architecture and Landscapes, NPS Midwest Regional Office*
- Marla McEnaney, *Historical Landscape Architect, NPS Midwest Regional Office*
- Barbara Fearon, *Superintendent, PEVI*
- Rodney Karr, *Maintenance Supervisor, PEVI*
- Jeff Helmer, *Park Ranger, PEVI*
- Rob Whitman, *Park Ranger, PEVI*
- Laura Knott, Project Manager, (CHG)
- Jane Jacobs, Historical Landscape Architect, (CHG)
- Deborah Slaton, Landscape Historian (WJE)
- Timothy Penich, Historical Architect (WJE)

The meeting focused on development of the Comparative Analysis and the Cultural Landscape Treatment Plan (CLTP) and associated Environmental Analysis (EA). Stakeholder groups were identified in the meeting. All identified stakeholders received letters of invitation to the public open house scheduled held on October 25, 2017.

A public meeting was held on October 6, 2016, in order to introduce the project to residents of South Bass Island, park staff, and interested stakeholders. The project was presented by the Superintendent and the planning team was introduced. Goals and objectives of the project were discussed and participants expressed various

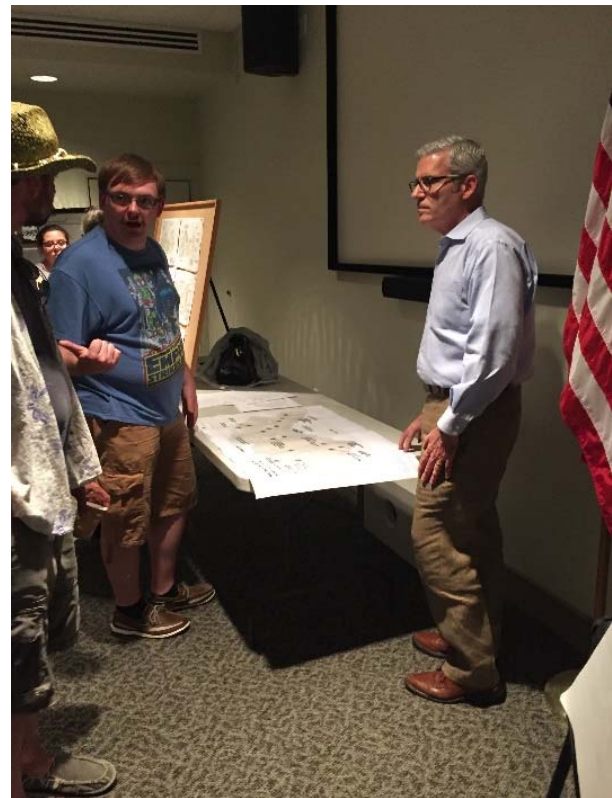
concerns, specifically about the effects on natural resources and wildlife and on the condition of the Village beach located south of the park and adjacent to the south seawall.

An internal planning workshop with Park staff and the planning team was held on May 16 -17, 2017, to review progress on the CLTP/EA and to review and comment on development of alternative design concept plans (Figure 4-27). This workshop led to development of more specific goals and objectives for the project. A second public open house was held on May 17, 2017 after the workshop in order to present conceptual alternatives to the public and gain feedback (Figure 4-28).

The public had an additional avenue of participation through a public open house on October 25, 2017. This meeting gave stakeholders and staff an opportunity to see developed concept design alternatives. Comments and suggestions were incorporated into the draft CLTP/EA based on public input. The next submission of the document will be for public review on the NPS Planning, Environment, and Public Comment (PECP) system website. After a 30-day review, all comments will be analyzed and any revisions deemed necessary will be made and incorporated into the final document.



**Figure 4-27:** Public meeting in May 2017 gave stakeholders a chance to give input based on presentation of conceptual alternatives.



**Figure 4-28:** Conceptual ideas were presented to the public and issues discussed with individual team members.

## 1 Consultation

2 Informal consultation with USFWS and the Ohio  
 3 SHPO office was initiated in January of 2017. The  
 4 National Park Service contacted Dan Everson,  
 5 field Office Supervisor of the Ohio Field Office of  
 6 U.S. Fish and Wildlife Service, Field Supervisor  
 7 with the U. S. Fish and Wildlife Service (USFWS)  
 8 through a letter dated January 13, 2017. The letter  
 9 served as notification that the park had begun the  
 10 NEPA process and was proposing to have an EA  
 11 available for public and regulatory review later in  
 12 the year. In addition, the letter served as a record  
 13 that the NPS was initiating informal consultation  
 14 with USFWS pursuant to Section 7 of the  
 15 Endangered Species Act of 1973, that requires that  
 16 a federal agency consult with the USFWS or the  
 17 National Marine Fisheries Service on any action  
 18 that may affect endangered or threaten species or  
 19 candidate species or that may result in adverse  
 20 modification of critical habitat. The National Park  
 21 Service received a letter with comments and  
 22 recommendations that will assist the park in  
 23 fulfilling the requirements for consultation under

24 section 7 of the Endangered Species Act of 1973,  
 25 amended.

26 The National Historic Preservation Act (NHPA);  
 27 National Environmental Protection Act (NEPA);  
 28 NPS Organic Act; NPS Management Policies,  
 29 2006; Director's Order 12: Conservation Planning,  
 30 Environmental Impact Analysis and Decision-  
 31 making; and Director's Order 28: Cultural  
 32 Resources Management Standard require the  
 33 consideration of impacts on cultural resources,  
 34 either listed in or eligible to be listed in, the  
 35 National Register of Historic Places. The National  
 36 Park Service notified Amanda Schraner Terrell,  
 37 Deputy State Historic Preservation Officer for  
 38 Ohio, through a letter dated January 12, 2017. In  
 39 accordance with Section 800.8(3)(c) of the  
 40 Advisory Council on Historic Preservation's  
 41 regulations, this letter informed the office of the  
 42 SHPO of the park's intention to use the EA to meet  
 43 its obligations under Section 106 of the NHPA. It  
 44 also stated that the EA will contain an Assessment  
 45 of Effect for all cultural resources potentially  
 46 affected by the proposed alternatives. The draft

1 CLTP/EA document was made available to the  
2 SHPO for review and comment.

### 3 **Preparers, Consultants and** 4 **References**

#### 5 **Preparers and Consultants**

6 NPS: Perry's Victory and International Peace  
7 Monument

8 Barbara Fearon, *Superintendent*

9 Rodney Karr, *Maintenance Supervisor*

10 Jeff Helmer, *Park Ranger*

11 Rob Whitman, *Park Ranger*

12 NPS: Midwest Regional Office

13 Bill Harlow, *Chief, Historic Architecture and*  
14 *Landscapes*

15 Marla McEnaney, *Historical Landscape Architect*

16 Consultants

17 Commonwealth Heritage Group:

18 Laura Knott, *Project Manager*

19 Jane J. Jacobs, *Historical Landscape Architect*

20 Christina Osborn, *Historic Preservation Specialist*

21 Wiss, Janney, Elstner

22 Deborah Slaton, *Landscape Historian*

23 Timothy Penich, *Historical Architect*

24 Period Architecture

25 Christopher Quirk, *Historical Architect*

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# Appendix A

## <sup>1</sup> **Table of Mitigation Measures**

<sup>2</sup>





<b>Environmental Assessment Mitigation Table</b>	
<b>Resource</b>	<b>Mitigation</b>
<b>General Considerations/Site Design and Construction</b>	<p>General:</p> <ul style="list-style-type: none"> <li>Where necessary for resource or visitor protection, work areas would be identified with construction fence, silt fence, or some similar material prior to any activity. The fencing would define the work zone and confine activity to the minimum area required. All protection measures would be clearly stated in the construction specifications, and workers would be instructed to avoid conducting activities beyond the work zone. Disturbances would be limited to areas inside the designated construction limits. No machinery or equipment would access areas outside the work limits.</li> <li>Construction equipment staging would occur within previously disturbed areas as much as possible. All staging and stockpiling areas would be returned to preconstruction conditions following construction. Contractors would be required to properly maintain construction equipment (i.e., mufflers and brakes) to minimize noise.</li> <li>All tools, equipment, barricades, signs, surplus materials, and rubbish would be removed from the project work limits upon project completion.</li> </ul> <p>Site Design and Construction:</p> <ul style="list-style-type: none"> <li>Identify and avoid unstable slopes and local factors that can cause slope instability.</li> <li>Develop a stormwater management plan to ensure compliance with regulations and prevent off-site migration of contaminated stormwater or increased soil erosion.</li> <li>Minimize the planned amount of land to be disturbed.</li> <li>Re-establish the original grade and drainage patterns to the extent practicable.</li> </ul>
<b>Natural Resources</b>	<p>Past and Ongoing:</p> <ul style="list-style-type: none"> <li>Ongoing park staff management and maintenance of turf would continue.</li> <li>Ongoing maintenance of trees and other vegetation within the park would continue.</li> <li>When sites are disturbed by maintenance or construction activities, park staff would re-establish vegetation based on recommendations of existing resource plans.</li> </ul>

<b>Environmental Assessment Mitigation Table</b>	
<b>Resource</b>	<b>Mitigation</b>
	<p>Future and Required:</p> <ul style="list-style-type: none"> <li>▪ Vegetation management would be consistent with the Cultural Landscape Treatment Plan recommendations and development of a comprehensive Vegetation Management Plan.</li> <li>▪ Best Management Practices (BMPs) would be required to support the implementation and management of actions taken in the preferred alternative. Refer to established BMPs for water quality actions. The NOAA Great Lakes Environmental Research Laboratory Strategic Plan and the Village of Put-in-Bay have established BMPs.</li> <li>▪ Erosion and sediment controls would be employed as needed and as required by regulations during construction to reduce soil erosion.</li> <li>▪ Natural resource management would be integrated in an overall program of cultural resource management of the historic designed landscape.</li> <li>▪ When soil excavation is an unavoidable part of an approved facility development project, the National Park Service would minimize soil excavation, erosion, and offsite soil migration during and after the activity.</li> <li>▪ Temporary barriers would be provided to protect existing trees and shrubs that are not identified for removal during construction activity.</li> <li>▪ Vegetation filter strips would be used to filter and clean sediment, organic material, nutrients, chemicals, and other pollutants from runoff water as it leaves a non-point source.</li> </ul>
<b>Cultural Resources</b>	<p>Past and Ongoing:</p> <ul style="list-style-type: none"> <li>▪ Monitoring of archeological sites would occur to determine visitor safety and resource protection concerns.</li> <li>▪ Monitoring water resource margins and shoreline would continue for erosion control.</li> <li>▪ Monitoring the Memorial column and plazas for any damage, potential damage, or vandalism would continue.</li> <li>▪ Prior to all construction or maintenance activities, cultural resources are identified and avoided to the extent possible.</li> </ul>

<b>Environmental Assessment Mitigation Table</b>	
<b>Resource</b>	<b>Mitigation</b>
	<ul style="list-style-type: none"> <li>▪ Ongoing management focusing on retaining and enhancing the general historic character of the Memorial and Grounds would continue.</li> </ul> <p>Future and Required:</p> <ul style="list-style-type: none"> <li>▪ All activities would comply with the Secretary of the Interior's Standards and Guidelines for Preservation of Historical Buildings, Structures, the Cultural Landscape, and Archeology.</li> <li>▪ All ABAAS accessibility interventions would be guided by Preservation Brief 32: Making Historic Properties Accessible.</li> <li>▪ Site condition assessments by NPS-approved archeologists would be part of project-specific surveys.</li> <li>▪ NPS would coordinate with the SHPO throughout the course of the project to protect and provide mitigation agreements for resources affected by the preferred alternative.</li> </ul>
<b>Visitor Use and Experience</b>	<p>Past and Ongoing:</p> <ul style="list-style-type: none"> <li>▪ Incidences of human interactions would be monitored.</li> <li>▪ Visitation data would be monitored through various methods such as visitor survey, transportation data, and concessioner data.</li> <li>▪ Periodic visitor surveys and data collection would be used to determine visitor use patterns, visitor characteristics, visitor use conflicts, and visitor preferences and satisfaction with interpretive and recreational opportunities, programs, services and facilities.</li> <li>▪ Resource condition surveys would be conducted as needed.</li> <li>▪ Continued management of the Memorial and Grounds would facilitate the visitor's understanding of the significance of the site and the Battle of Lake Erie in 1813.</li> <li>▪ NPS facility managers would continue to monitor areas used by visitors for signs of vegetation disturbance, trampling, erosion, or the development of social trails in the designed historic landscape.</li> <li>▪ Existing facilities would be retrofitted and new facilities designed to meet Leadership in Energy and Environmental Design (LEED) standards to demonstrate the NPS</li> </ul>

<b>Environmental Assessment Mitigation Table</b>	
<b>Resource</b>	<b>Mitigation</b>
	<p>commitment to protect our natural and cultural resources for future generations.</p> <p>Future and Required:</p> <ul style="list-style-type: none"> <li>▪ Visitor use and access to areas of highly sensitive and vulnerable cultural or natural resources would require mitigation measures. Appropriate activities in these areas would be limited to research and passive recreational uses. Interpretive programs and exhibits would provide information and interpret ongoing research activities.</li> <li>▪ Visitor Center would be made fully ABAAS accessible as will the pedestrian circulation system throughout the park, and the Memorial plazas to the extent decided upon.</li> </ul>
<b>Human Health and Safety</b>	<p>Past and Ongoing:</p> <ul style="list-style-type: none"> <li>▪ General public would be informed of construction activities or other management or maintenance activities through press releases and general interpretive presentation.</li> <li>▪ No public access would be allowed to any areas of construction.</li> <li>▪ Appropriate regulatory and/or enforcement agencies would be notified prior to any construction to assist in safely managing pedestrian or vehicular traffic. Warning signs would be posted along village roads and pedestrian circulation in the park and the community.</li> </ul> <p>Future and Required:</p> <ul style="list-style-type: none"> <li>▪ The ongoing and required measures already in place that ensure visitor safety would continue where appropriate in the implementation of the actions proposed in the preferred alternative.</li> <li>▪ NPS staff would mitigate impacts arising from increases in visitation due to expanded facilities and interpretation at the park.</li> </ul>



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# Appendix B

## <sup>1</sup> **Consultation Letters**





# United States Department of the Interior

## NATIONAL PARK SERVICE

PERRY'S VICTORY AND INTERNATIONAL PEACE MEMORIAL

93 Delaware Avenue, P.O. Box 549

Put-in-Bay, Ohio 43456-0549



PEVI 1.B.1.A.2

January 19, 2017

Amanda Schraner Terrell  
Deputy State Historic Preservation Officer  
Ohio History Connection  
800 E. 17<sup>th</sup> Avenue  
Columbus, OH 43211-2474

Re: Cultural Landscape Treatment Plan and Environmental Assessment  
***Perry's Victory and International Peace Memorial***  
Park Notification of Combination NEPA/Section 106 Compliance

Dear Ms. Terrell:

Perry's Victory and International Peace Memorial (PEVI) is a 14.5-acre national park in Ottawa County, Ohio. The site is located on South Bass Island, in the western basin of Lake Erie. The island is approximately three miles long by one mile wide. The park spans a narrow isthmus (about 250 yards wide) between the village of Put-in-Bay and the eastern portion of South Bass Island (see attached USGS maps). Much of the island is now developed as resort and summer housing, but farming and viticulture predominated in the past. The park is a commemorative, designed landscape associated with the Beaux-Arts School of design. Significant features include open lawns, trees and shrubs, sloped terraces, sidewalks, seawalls, and the raised plaza and memorial column standing at the center of the site. From the observation platform near the top of the memorial, visitors may view the site of the victory of U.S. Commodore Oliver Hazard Perry and his forces over those of the British Navy in the Battle of Lake Erie during the War of 1812. Set in the middle of its original grounds, the massive Doric column of Milford pink granite topped by an immense bronze lantern rises 352 feet, as if directly from the waters of that battle, to dominate the landscape (see attached photographs.) The column and its grounds are an excellent example of the harmony of building and landscaping that is integral to the Beaux-Arts style in America, with its monumental classicism in architecture set within a designed, formal landscape. Management of this site was transferred to the National Park Service (NPS) on July 6, 1936.

In 1976, National Park Service submitted a nomination for Perry's Victory and International Peace Memorial to the National Register of Historic Places, and the site was listed on July 25, 1979. The nomination included only part of the park within the original grant of the Perry's Victory and International Peace Memorial land to the U.S. The focus of the original nomination was the memorial column and its surrounding plaza. At the time the nomination was written, cultural landscapes were rarely recognized, and so were not discussed. Perry's Victory and International Peace Memorial was updated in 2014 to include further development of the park's grounds, expansions of the National Register's classification regarding Areas of Significance, refinement of other National Register Criteria, and the inclusion of cultural landscapes as nominated resources. In addition to the nomination and its



update, other planning documents developed for PEVI include: a cultural landscape report (1994), a cultural landscape inventory (2011), a long range interpretive plan (2011), and the park's foundation document (2012).


A NPS contractor is preparing an update of the 1994 cultural landscape report (CLR) for Perry's Victory and International Peace Memorial by providing at least two alternatives for a revised treatment plan, accompanied by an environmental assessment to meet requirements for federal environmental policy compliance. The existing CLR was completed prior to approval of CLR standards and lacks sufficient direction for moving forward with intentional design additions and management of the landscape. The park has accrued features based on various types of planning decisions during the twentieth century. Guidance for preservation, removal, or rehabilitation of features within the park boundaries is needed and essential for the development of comprehensive treatment plan alternatives that encompass the entire designed landscape of PEVI (see attached project boundary map).

To comply with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA) of 1966, as amended, an environmental assessment (EA) must be developed that will evaluate impacts of the proposed action in the treatment plan alternatives to natural and cultural resources. In accordance with Section 800.8(3)(c) of the Advisory Council on Historic Preservation's regulations (36 CFR 800), I am notifying your office in advance of the park's intention to use the EA to meet its obligations under Section 106 of the NHPA. This EA, which will contain the Assessment of Effect for all cultural resources potentially affected by the proposed project, will be available for your review and comment later this year.

This letter also serves as notification that we have begun the federal compliance process, and in order to comply, we are gathering information concerning existing resources within the project area. During this early stage in the process, we are seeking information on any cultural resource restraint or concern that may be a possible planning issue. If you are aware of any such issue, please do not hesitate to contact us.

At this time, we anticipate no significant cultural resource impacts associated with the project, and we look forward to receiving any guidance or comments you may have regarding the process or the project itself. Thank you for helping in this matter, and if you need any additional information or should you have any questions regarding this request, please feel free to contact me at (419) 285-2184 ext. 1225 or in writing at Perry's Victory and International Peace Memorial, 93 Delaware Avenue, P.O. Box 549, Put-in-Bay, OH 43456-0549.

Sincerely,

  
Barbara Fearon  
Superintendent

Enclosure

cc: Jane Jacobs, CHG



# United States Department of the Interior

## NATIONAL PARK SERVICE

### PERRY'S VICTORY AND INTERNATIONAL PEACE MEMORIAL

93 Delaware Avenue, P.O. Box 549

Put-in-Bay, Ohio 43456-0549



PEVI 1.B.1.A.2

January 19, 2017

Dan Everson  
Field Office Supervisor  
Ohio Field Office  
U.S. Fish and Wildlife Service  
4625 Morse Road, Suite 104  
Columbus, OH 43230  
Phone: 614-416-8993  
Email: [Dan\\_everson@fws.gov](mailto:Dan_everson@fws.gov)

Re: Cultural Landscape Treatment Plan and Environmental Assessment  
***Perry's Victory and International Peace Memorial***  
Informal consultation with U.S. Fish and Wildlife for Threatened and Endangered Species

Dear Mr. Everson:

Perry's Victory and International Peace Memorial (PEVI) is a 25-acre national park in Ottawa County, Ohio. The site is located on South Bass Island, in the western basin of Lake Erie. The island is approximately three miles long by one mile wide. The park spans a narrow isthmus (about 250 yards wide) between the village of Put-in-Bay and the eastern portion of South Bass Island. Much of the island is now developed as resort and summer housing, but farming and viticulture predominated in the past. The park is a commemorative, designed landscape associated with the Beaux-Arts School of design. Significant features include open lawns, trees and shrubs, sloped terraces, sidewalks, seawalls, and the raised plaza and memorial column standing at the center of the site. From the observation platform near the top of the memorial, visitors may view the site of the victory of U.S. Commodore Oliver Hazard Perry and his forces over those of the British Navy in the Battle of Lake Erie during the War of 1812. Set in the middle of its original grounds, the massive Doric column of Milford pink granite topped by an immense bronze lantern rises 352 feet, as if directly from the waters of that battle, to dominate the landscape (see attached photographs.) The column and its grounds are an excellent example of the harmony of building and landscaping that is integral to the Beaux-Arts style in America, with its monumental classicism in architecture set within a designed, formal landscape. Management of this site was transferred to the National Park Service (NPS) on July 6, 1936. The approximate UTM coordinates of the site are listed below. (See attached USGS map)

#### **Latitude/Longitude Coordinates**

The 1979 National Register listing gives the UTM Coordinates of the center of the Memorial column as E17 349020 4612760.

Datum if other than WGS84: NAD83 (enter coordinates to 6 decimal places.)

- |                         |                      |
|-------------------------|----------------------|
| 1. Latitude: -82.813499 | Longitude: 41.654213 |
| 2. Latitude: -82.809440 | Longitude: 41.655990 |



- |                         |                      |
|-------------------------|----------------------|
| 3. Latitude: -82.809440 | Longitude: 41.654572 |
| 4. Latitude: -82.811792 | Longitude: 41.652826 |
| 5. Latitude: -82.813501 | Longitude: 41.652896 |

A NPS contractor is preparing an update of the 1994 cultural landscape report (CLR) for Perry's Victory and International Peace Memorial by providing at least two alternatives for a revised treatment plan, accompanied by an environmental assessment to meet requirements for federal environmental policy compliance. The existing CLR was completed prior to approval of CLR standards and lacks sufficient direction for moving forward with intentional design additions and management of the landscape. The park has accrued features based on various types of planning decisions during the twentieth century. Guidance for preservation, removal, or rehabilitation of features within the park boundaries is needed and essential for the development of comprehensive treatment plan alternatives that encompass the entire designed landscape of PEVI (see attached project boundary map).

This letter serves as notification that we have begun the National Environmental Policy Act (NEPA) process and are proposing to have an Environmental Assessment (EA) available for public and regulatory review later this year. In addition, this letter serves as a record that the NPS is initiating informal consultation with your agency pursuant to Section 7 of the Endangered Species Act of 1973, that requires that a federal agency consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service on any action that may affect endangered or threatened species or candidate species or that may result in adverse modification of critical habitat. The compliance process requires we request information concerning federal and state rare, threatened, and endangered species documented or reasonably suspected within 0.5 miles of the project site, which is depicted on the enclosed USGS Quadrangle. The project team reviewed the most current list of federally listed species that may occur in Ottawa County, Ohio.

The USFWS Ohio Field Office website identifies the following species as potentially present in Ottawa County, Ohio:

<u>Species</u>	<u>Federal Status</u>
Indiana Bat ( <i>Myotis sodalis</i> )	(E)
Northern Long-eared Bat ( <i>Myotis septentrionalis</i> )	(T)
Kirtland's Warbler ( <i>Setophaga kirtlandii</i> )	(E)
Piping Plover ( <i>Charadrius melodus</i> )	(E)
Eastern Prairie Fringed Orchid ( <i>Platanthera leucophaea</i> )	(T)
Lakeside Daisy ( <i>Tetraneuris herbacea</i> )	(T)
Rufa Red Knot ( <i>Calidris canutus rufa</i> )	(T)
Eastern Massasauga ( <i>Sistrurus catenatus</i> )	(PT)
Lake Erie Watersnake ( <i>Nerodia sipedon insularum</i> )	(SC)
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	(SC)

**Important Note:** This list reflects data available as of October 2015, and will change as new data becomes available.

E = Endangered	SC = Species of Concern
T = Threatened	CH = Critical Habitat
C = Candidate	P = Proposed (T/T/CH)

We would appreciate it if you would confirm the list of species to be addressed in the Cultural Landscape Treatment Plan/Environmental Assessment. Also, should you know of or come across any other resource constraint that may be a possible planning issue, please do not hesitate to contact us. We anticipate no significant environmental impacts associated with the project and look forward to receiving any guidance or comments you may have regarding the process or the project itself. Once prepared, we will provide you with a draft of the Treatment Plan/Environmental Assessment with preliminary effects determination and proposed mitigation, if any, for your review and concurrence.

Thank you for helping in this matter, and if you need any additional information or should you have any questions regarding this request, please feel free to contact me at (419) 285-2184 ext. 1225 or in writing at Perry's Victory and International Peace Memorial, 93 Delaware Avenue, P.O. Box 549, Put-in-Bay, OH 43456-0549.

Sincerely,

A handwritten signature in cursive script, appearing to read "Barbara Fearon".

Barbara Fearon  
Superintendent

Enclosure

cc: Jane Jacobs, CHG



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE



Ecological Services  
4625 Morse Road, Suite 104  
Columbus, Ohio 43230  
(614) 416-8993 / FAX (614) 416-8994  
February 21, 2017

Ms. Barbara Fearon  
Superintendent  
Perry's Victory and International Peace Memorial  
93 Delaware Ave.,  
P.O. Box 549  
Put-in-Bay, OH 43456-0549

FAHLS# 03E15000-2017-TA-0803

Re: Cultural Landscape Treatment Plan and Environmental Assessment, Perry's Victory and International Peace Memorial

Dear Ms. Fearon,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

**SPECIES OF CONCERN COMMENTS:** The project lies within the range of the monarch butterfly (*Danaus plexippus plexippus*). The U.S. Fish and Wildlife Service (Service) has determined that listing under the ESA may be warranted and is currently conducting a status review of the monarch. Monarch butterflies are found throughout Ohio and some populations migrate vast distances across multiple generations each year. The Lake Erie islands provide important migration and stopover habitat for monarchs as they fly between the U.S., Mexico and Canada – a journey of over 3,000 miles. This journey has become more perilous for many monarchs because of threats along their migratory paths and on their breeding and wintering grounds. Monarch populations have declined significantly in recent years. Threats include habitat loss – particularly the loss of milkweed, the monarch caterpillar's sole food source – and mortality resulting from pesticide use.

Habitat within the project area is primarily composed of manicured lawn. The Service suggests that the Cultural Landscape Treatment Plan incorporate species of nectar-producing plants and milkweed endemic to the area where the mix is applied to benefit monarchs and other pollinators. The Service is partnering with groups across the state to identify and implement site-specific pollinator (including monarch) habitat restoration and management. We suggest that you contact Cody Grasser, 419-551-3875, [cgrasser@pheasantsforever.org](mailto:cgrasser@pheasantsforever.org), who has expertise in planning and implementing pollinator habitat projects in northwest Ohio.



The project lies within the range of the **Lake Erie Watersnake** (*Nerodia sipedon insularum*), a state endangered species, and a Federal species of concern that was recently removed from the Federal list of Endangered and Threatened Wildlife and Plants due to recovery. The Watersnake is found on the offshore islands and in adjacent waters of Lake Erie. Watersnake summer habitat consists mainly of rocky shorelines with adjacent vegetation and shoreline structures such as crib docks. Winter hibernation habitat for the watersnake includes the island interior and the shoreline/vegetation interface. Currently the shoreline adjacent to the Perry's Victory and International Peace Memorial is primarily composed of a concrete seawall with some rock protection. Because of the vertical nature of the structure and the impact of wave scour, this area likely provides marginal summer habitat for Lake Erie Watersnakes. Summer habitat for Lake Erie Watersnakes could be improved by allowing vegetation to grow along the shoreline and incorporating more rock features close to the shoreline.

In order to avoid and minimize any impacts to the Lake Erie Watersnake and its habitat we recommend that any excavation or ground disturbance be completed between April 16 and October 14, and only then when the air temperature is above 60 degrees Fahrenheit for five consecutive days prior to excavation and on the day of excavation. These warm season temperatures allow the snakes to be warm enough to move out of harm's way if encountered during construction. If any Lake Erie Watersnakes are observed within the project area during construction they should not be harmed--intentional killing of Lake Erie Watersnakes is prohibited by state law. Further, we recommend implementation of the Service's Lake Erie Watersnake Post-Delisting Guidelines for Construction, Development, and Land Management (attached).

**FEDERALLY LISTED SPECIES COMMENTS:** All projects in the State of Ohio lie within the range of the federally endangered **Indiana bat** (*Myotis sodalis*) and the federally threatened **northern long-eared bat** (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags  $\geq 3$  inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

Should the proposed site contain trees  $\geq 3$  inches dbh, we recommend that trees be saved wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or



abandoned mines are present and trees  $\geq 3$  inches dbh cannot be avoided, we recommend that removal of any trees  $\geq 3$  inches dbh only occur between October 1 and March 31. Seasonal clearing is being recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see <http://www.fws.gov/midwest/endangered/mammals/nleeb/index.html>), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

If implementation of this seasonal tree cutting recommendation is not possible, summer surveys may be conducted to document the presence or probable absence of Indiana bats within the project area during the summer. If a summer survey documents probable absence of Indiana bats, the 4(d) rule for the northern long-eared bat could be applied. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Endangered Species Coordinator for this office. Surveyors must have a valid federal permit. Please note that summer surveys may only be conducted between June 1 and August 15.

The proposed project lies within the range of the **Kirtland's warbler** (*Setophaga kirtlandii*), a federally listed endangered species. The Kirtland's warbler is a small blue-gray songbird with a bright yellow breast. This species migrates through Ohio in the spring and fall, traveling between its breeding grounds in Michigan, Wisconsin, and Ontario and its wintering grounds in the Bahamas. While migration occurs in a broad front across the entire state, approximately half of all observations in Ohio have occurred within 3 miles of the shoreline of Lake Erie. During migration, individual birds usually forage in shrub/scrub or forested habitat and may stay in one area for a few days. If clearing of suitable habitat cannot be avoided, to preclude adverse effects to migrating Kirtland's warblers, clearing within 3 miles of the shoreline of Lake Erie should not occur from April 22<sup>nd</sup> – June 1<sup>st</sup>, or from August 15<sup>th</sup> – October 15<sup>th</sup>.

No tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the National Park Service, is completed. We recommend that the federal action agency submit a determination of effects to this office, relative to the Indiana bat, northern long-eared bat, and Kirtland's warbler, for our review and concurrence.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be initiated to assess any potential impacts.


These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and/or state



lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at [john.kessler@dnr.state.oh.us](mailto:john.kessler@dnr.state.oh.us).

If you have questions, or if we can be of further assistance in this matter, please contact Biologist Megan Seymour at (614) 416-8993 ext. 16 or [Megan\\_Seymour@fws.gov](mailto:Megan_Seymour@fws.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Dan Everson", followed by a horizontal line.

Dan Everson  
Field Supervisor

cc: Nathan Reardon, ODNR-DOW  
Kate Parsons, ODNR-DOW  
Cody Grasser, Pheasants Forever, [cgrasser@pheasantsforever.org](mailto:cgrasser@pheasantsforever.org)

Attachment: Lake Erie Watersnake Post-Delisting Guidelines for Construction, Development, and Land Management



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ecological Services  
4625 Morse Rd., Suite 104  
Columbus, Ohio 43230  
(614) 416-8993 / FAX (614) 416-8994

### **Lake Erie Watersnake Post-Delisting Guidelines for Construction, Development, and Land Management August 2011**

The Lake Erie Watersnake (*Nerodia sipedon insularum*) was listed as "threatened" under the Endangered Species Act in 1999, but in August of 2011 was removed from the list due to recovery. Lake Erie Watersnake populations will continue to be monitored for 5 years to ensure the population persists at a stable level. The U.S. Fish and Wildlife Service (Service) has developed the following voluntary guidelines to assist island landowners in avoiding and minimizing impacts to Lake Erie Watersnakes during typical land management and construction activities. The Service strongly encourages island residents to follow these guidelines to protect watersnake habitat, ensure population persistence, and prevent re-listing of the subspecies. *Intentional killing of Lake Erie Watersnakes is still prohibited by State law.*

The Lake Erie Watersnake occurs on the islands in the western basin of Lake Erie. Summer habitat includes cliffs with crevices, rocky shorelines, and rock-filled structures such as docks, breakwalls, and shoreline erosion control structures. Lake Erie Watersnakes forage in Lake Erie for small fish, primarily round goby. Suitable winter hibernation sites include cracks and crevices in bedrock, rocky soils, animal burrows, tree root masses, and human-made structures such as foundations, drainage tiles, and building pads.

#### Shoreline Management

The island shoreline including areas adjacent to interior island ponds, inlets, bays, and marinas, are important habitat for Lake Erie Watersnakes as well as native birds, fish, amphibians, and mammals. Shoreline vegetation also helps to stabilize banks, prevent erosion, and promote water quality. Landowners are encouraged to avoid mowing within 69 feet (21 m) of the shoreline to protect these important habitat and water quality functions.

If shoreline mowing is necessary, mowing between April 15 and September 15 should be completed at dusk, when watersnakes will have taken cover for the night. Mowers should utilize a high setting, and the area to be mowed should be actively monitored for watersnakes. If Lake Erie Watersnakes are encountered during mowing, activities can cease until the snake has left the area on its own, or the snake can be removed to a location outside of the mowing area and near the shoreline.

Excavation or removal of shrubs, standing or downed trees, root masses, animal burrows, piled rocks, cliffs, or bedrock within 69 feet (21 m) of the shoreline, ponds, inlets, bays, and marinas should be avoided. If necessary, excavation of these features should only occur after April 15 and before October 15, when temperatures are above 60 degrees Fahrenheit. Within 69 feet (21 m) of shore, heavy machinery should be limited to paved areas so as not to harm watersnakes that may have retreated under rocks, logs, and other material.

The Service encourages preservation and construction of shoreline structures with designs beneficial to watersnakes. These include timber or steel crib docks and riprap erosion control structures instead

of concrete or sheet steel. Any project that will impact the shoreline or waters of Lake Erie **must** be coordinated with the Buffalo District of the U.S. Army Corps of Engineers (Corps) to ensure compliance with the Clean Water Act. The Corps can be contacted at (716) 879-4330.

#### Excavation

During hibernation, Lake Erie Watersnakes are unable to move and are vulnerable to any disturbance of their hibernation sites. Excavation of any kind in potential suitable winter hibernation habitat within 528 ft (161 m) of shore should be avoided between October 15 and April 15. Activities to be avoided include, but are not limited to, digging foundations, burying utility lines, removing tree roots or hollow tree bases, and destroying human-made structures such as foundations or drainage tiles.

Excavation activities occurring between April 16 and May 31, or between September 15 and October 14 should only be conducted when air temperatures are above 60 degrees Fahrenheit. The area should be actively monitored for snakes before and during excavation and any watersnakes found should be carefully removed to a location outside of the construction area and near the shoreline.

Any holes or trenches that are dug should be filled in as soon as possible to prevent watersnakes from inadvertently falling into them and becoming trapped. Holes or trenches should be inspected for Lake Erie Watersnakes before being filled.

#### Erosion Control

Mesh or woven erosion control fabrics or blankets should **NOT** be used to stabilize disturbed areas, as they have been documented to entangle and kill Lake Erie Watersnakes and other snake species. Loose straw or mulch can be used as an alternative.

#### Tree Removal

Tree root masses may provide suitable hibernation habitat for the Lake Erie Watersnake. If you plan to remove trees on your property, the Service recommends that only the above-ground portion of the tree be removed. The root mass should be left underground.

Summary of habitat management practices, timing, and location where applicable.

<b>Time</b>	<b>Location</b>	<b>Recommendation</b>
Oct 15-April 15	Within 528 feet (161 m) of shore	No Excavation.
April 16-May 31	Within 528 feet (161 m) of shore	Excavation only when temperature above 60° F. Mow at dusk, on high setting.
June 1-Sept 14	Within 69 feet (21 m) of shore	Mow at dusk, on high setting.
Sept 15-Oct 14	Within 528 feet (161 m) of shore	Excavation only when temperature above 60° F. Mow at dusk, on high setting.

#### Further Information

The Service is available to provide technical assistance regarding the Lake Erie Watersnake, proposed development projects, and land management activities. Questions should be directed to the Service at (614)416-8993. Additional information about the Lake Erie Watersnake is also available at our website: [http://www.fws.gov/midwest/Ohio/endangered\\_LEWS.html](http://www.fws.gov/midwest/Ohio/endangered_LEWS.html) and at [www.RespectTheSnake.com](http://www.RespectTheSnake.com).





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# References

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